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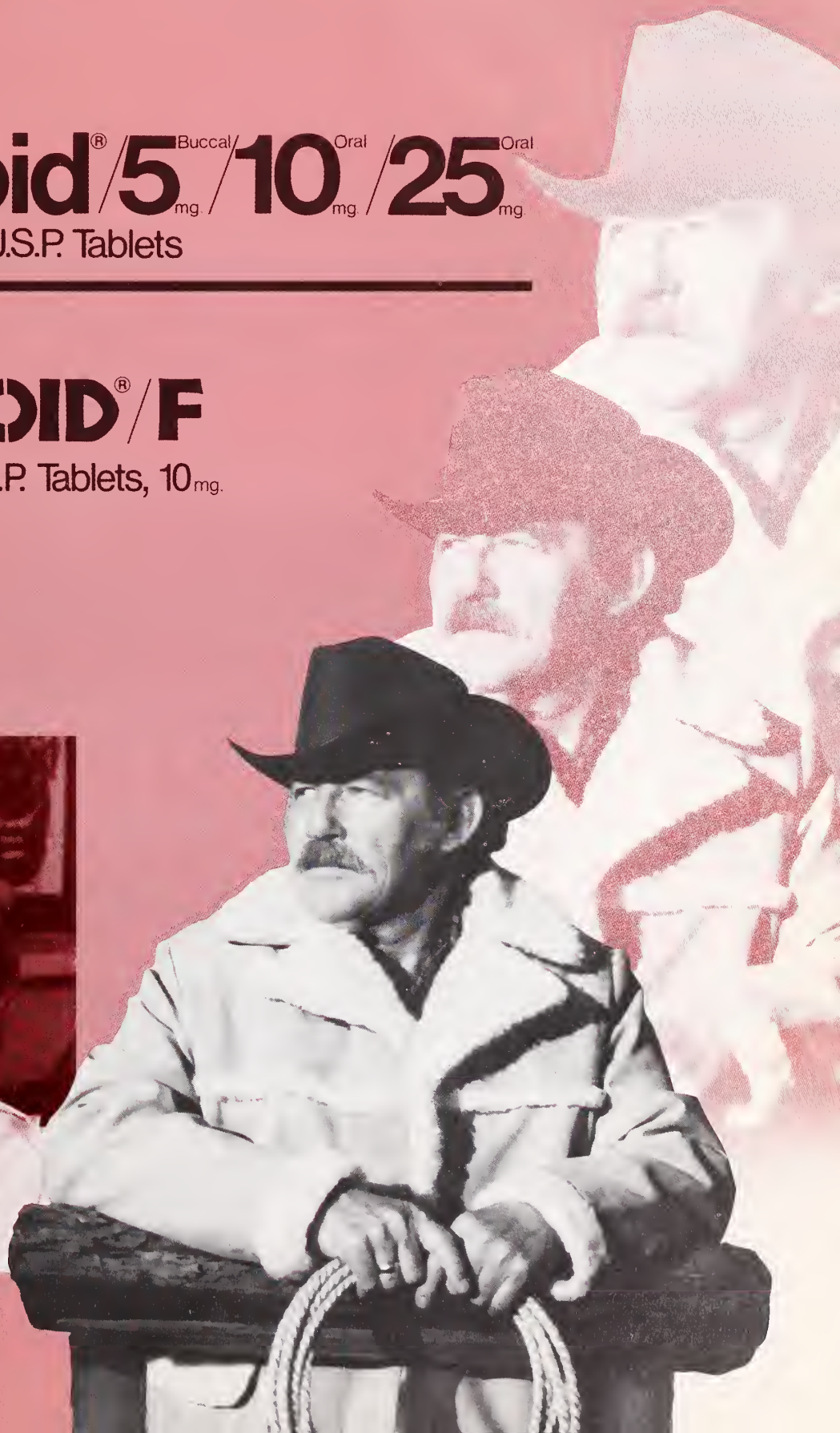
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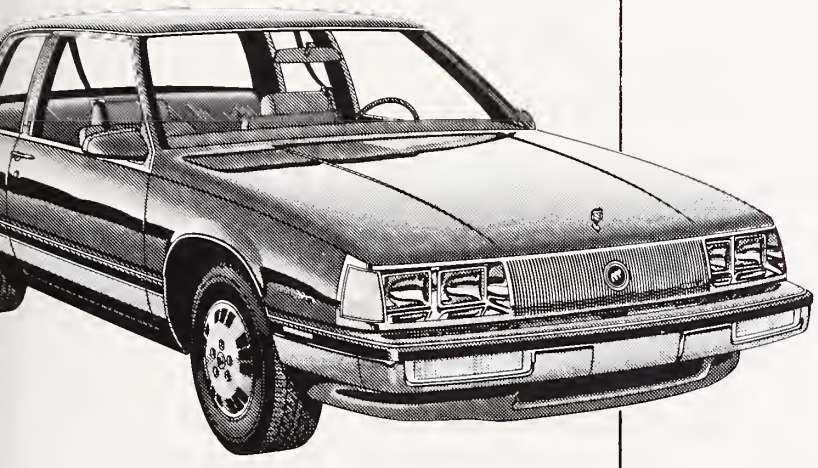
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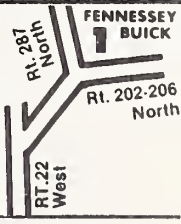
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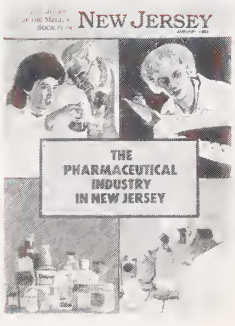
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On The Cover: New Jersey has one of the strongest health-related industries in the United States. Read the story beginning on page 19. Cover illustration by Frank Cecala.



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MEMBERSHIP NEWSLETTER

MSNJ

THE MEDICAL SOCIETY OF NEW JERSEY VOLUME 18

NEW REALITIES OF MEDICAL PRACTICE

The AMA has developed a course in practice management to cope with the many changes in practice patterns such as new reimbursement methods, new government regulations, all of which contribute to making the delivery of medical care increasingly complex.

A series of videocassette and audiocassette courses are being offered for purchase or rental from the Department of Registration and Fulfillment, American Medical Association, 535 N. Dearborn Street, Chicago, IL 60610.

For additional information there is a toll-free number: 1-800-621-8335. These useful tools can help you adapt to the changing practice environment.

MARTIAL ARTS ANYONE?

Physicians Martial Arts Association (PMAA), a national organization founded by Millard Seto, M.D., in 1973, is being reactivated and is open to all physicians (M.D., D.O., D.D.S., D.M.D.) of any rank for all types and styles of martial arts. The purposes are: 1) to promote the cause of martial arts medicine; 2) to make qualified physicians available to all martial arts organizations as medical advisors; 3) to put physicians with an interest in the martial arts in contact with each other; 4) to conduct courses for instructors in the martial arts to provide basic knowledge in how to recognize and handle martial arts injuries; and 5) to utilize skills as physicians to promote the martial arts and their basic precepts of honor, humility, courtesy, and respect. Interested physicians, for more information, write: PMAA, P. O. Box 2175, Honolulu, HI 96805.

NEWS SUMMARY

The Congressional Budget Office has revised its projections on the bankruptcy of the Medicare Trust Fund. CBO now believes the fund will cross over to an $13 billion deficit position in 1994 and continue thereafter. The projections assume annual program outlays of about 11.8 percent. If annual hospital reimbursements were reduced by 1 percent during the ten-year projection period, the fund would continue to have a surplus by 1995 according to CBO.

A recent survey of CEOs indicates that in restructuring employee benefits, among other things, Congress should be concerned with escalating health care costs and employee access to quality health care. The CEOs also felt that a tax cap on benefits was not appropriate and a tax cap would probably result in reduced benefits.

Prior to the 98th Congress' adjournment, Senator David Durenberger introduced legislation which would end the current PPS pass-through payment for direct medical education costs beginning in October 1985. Funding under the proposal would come from grants to the states. Expect the proposal to be reintroduced in the 99th Congress and to serve as a discussion paper in the interim.

HCFA has released its latest PPS implementation update. Average length of stay continues below pre-PPS levels and outliers are 2 percent of total PPS discharges.

An IRS private letter ruling has been received which approves a performance award program for a 501(c)(3) health system's department managers. (*Washington Health Care Newsletter*, October 1984)

IMPLEMENTATION OF TEFRA

As you know, TEFRA amendments to the Medicare law require that the professional components of salaried physicians' services must be billed to Part B of Medicare. Either the hospital or the doctor may perform this billing. All physicians who are paid by a hospital for any patient services must comply with this law.

It has been clearly established that TEFRA will be implemented in New Jersey on or about January 1, 1985.

Prudential, the Part B carrier for Medicare in New Jersey, has mailed a packet of information, including worksheets and forms, to all New Jersey hospitals.

If you are an institutional-based physician, either full or part time, you will be asked to sign several documents which will be filed with the carrier. Please review the material very carefully, and make certain it is accurate and fairly represents your situation with your hospital. Do not hesitate to consult your accountant, attorney, specialty society, or the medical director at Medicare (James E. D. Gardam, M.D.) for assistance. Our review indicates that some of the formulas and relative values assigned may not be consistent with current practice.

It should be noted that in certain instances these complex Medicare reimbursement policies may produce unrealistic payment levels and otherwise anomalous results. Section 405.502(c) of the Medicare regulations states that "carriers are to exercise judgment based on factual data on the charges made by physicians to patients generally . . . so that determinations of reasonable charge are realistic and equitable." Section 405.502(a)(7) indicates that payments should be "inherently reasonable."

The chairman of the House Committee on Ways and Means and the chairman of the Senate Finance Committee have written to the Secretary of Health and Human Services, and directed that those hospital-based physicians who have compensation-related charges substantially below prevailing charge levels of nonhospital-based physicians should have their profiles adjusted accordingly.

Therefore, you should not assume that you have been frozen into an inadequate level of reimbursement.

PASSIVE SMOKING

As a nonsmoker, if you have ever been irritated by being subjected to the intake of environmental tobacco smoke, you will be interested to know that your discomfort is more than a psychological quirk.

The *New England Journal of Medicine* (September 27, 1984) reported that the major metabolite of nicotine found in blood and in the urine is cotinine. The urinary cotinine of nonsmokers who lived in or worked in an atmosphere contaminated with tobacco smoke was considerably elevated over those tested who were functioning in an atmosphere free of such contamination.

Ample evidence has been presented to indicate an association of passive smoking (undesired by recipient) with lung cancer, pulmonary dysfunction, induction of angina pectoris, Raynaud's phenomenon, retarded growth in children, and increased platelet clumping which may lead to the development of atherosclerosis.

Incidentally, you are setting fire to approximately $459.25 a year if you smoke a pack of cigarettes a day and giving up 10 to 15 years of life.

PROPOSED RULE: INDEPENDENT LABORATORIES

The Division of Medical Assistance and Health Services has proposed a rule which appeared in the November 19, 1984, issue of the *New Jersey Register* as 16 N.J.R. 3162(a).

The proposal will allow state, county, and municipal laboratories to participate in the New Jersey Medicaid Program provided they meet the same criteria as other participating independent laboratories, including Medicare (Title XVIII) certification.

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PROFESSIONAL LIABILITY COMMENTARY*

Risk Prevention

Consultations and Their Risks; MIIENJ Newsletter; Physician/Nurse Responsibilities; Surgery Claims

Many cases occur in which a physician is criticized for failure to obtain a second opinion, or failure to recognize his own limitations and refer a patient to a specialist. Inherent in the consultation process are risks both to the attending and consulting physicians. Problem areas include the following:

1. *Timeliness of the consult/referral:* If a physician delays in the performance of a consultation and injury results, then the consultant may be liable. In one case, an emergency room physician referred the patient to an orthopedic specialist without any communication as to the seriousness of the case. The orthopedist's delay in seeing the patient resulted in the loss of the patient's leg. It is essential that the referring physician communicate the urgency of a situation and that the consultant indicate the appropriate time he will see the patient. If the situation requires immediate attention and the consultant is unable to respond promptly, the consultant should suggest another referral.

2. *Scope of the consultation:* There are differing opinions as to whether or not a consultant has an obligation to do a complete workup, or to limit the examination to only those areas about which he specifically has been asked to consult. Several claims involve allegations that a consultant failed to look at the "whole" patient but only treated a specific problem. Examples of this type of claim involved internists treating for possible postoperative pulmonary embolus and failing to diagnose gastric perforation after a gastric stapling procedure, and failure to note postsurgical gas gangrene while treating for fever. This issue is complicated further, some consultants say, by the fact that they are asked to consult only on a specific problem as many attending physicians are hesitant to lose control of the patient. One case involved an internist who performed a consultation for the doctor who was covering for the family doctor. The internist was asked to manage the patient's diabetes, and continued to do so after the family physician resumed care. However, the patient died from infections which allegedly were treated with ineffective antibiotics by the family physician. The internist was sued and criticized for failure to supervise the family physician's antibiotic therapy. This resulted in a dilemma because the internist maintained the family physician did not want help with any aspect of care except diabetes management.

3. *Responsibility for care after consultation:* Problems frequently arise after consultation for both the attending and consulting physicians because the responsibility for future care has not been delineated clearly. Frequently, the attending physician assumes that the consultant is following the patient while the consultant assumes that all responsibility was fulfilled when the recommendations were made in the written consultation report. The result is that no one is taking care of the patient and, when damage to the patient results, both physicians are sued.

4. *Failure to document:* A physician often is asked informally for his opinion. This frequently happens in the hospital hallway, and the patient is seen only briefly and on the one occasion. The physician may not even consider this a consultation. Frequently, he does not write a report or bill the patient. Some doctors feel that not charging the patient will release them from any risk of liability. However, if an adverse result occurs, this "consultant" will be named in any malpractice suit—particularly if the attending says in the progress note that he "consulted with Dr. A who said. . . ."

An obstetrician was asked to check the labor progress of a breech presentation. He verbally okayed a trial of labor, but did not specify the length of time he thought was acceptable. Immediately after seeing the patient, he left town on vacation. He did not write a consultation note in the medical record and, in fact, did not consider that he had done a consultation. A prolonged trial of labor ultimately resulted in a cesarean section and a brain-damaged baby. The obstetrician was included in the suit.

5. *Communication:* Communication problems can include failure to communicate the urgency of the consultation to either the patient or the consultant, failure to continue communication while care is undertaken, or inappropriate communication in front of the patient or family when the attending physician and consultant do not agree.

In one case involving a geographical distance, the attending physician had never met the specialist to whom the patient was referred. The two physicians never spoke to each other and communicated only through chart entries which, unfortunately, were not complete. Conflicting drugs were ordered and given—with permanent damage to the patient.

*This item from the Department of Professional Liability Control, MSNJ, was prepared by James E. George, M.D., J.D., and A. Ronald Rouse, who are respectively, Director of the Department and Director of Special Projects.

In another case, an internist was asked to consult for a surgeon. They disagreed strongly on the diagnosis and care of the patient. They argued in front of the patient's family. When it was necessary to transfer the patient to a facility which could provide hemodialysis, each physician wrote his own discharge summary. To compound the liability problems, each physician then posted his discharge summary on the bulletin board at the hospital. Needless to say, this public fighting made a possibly defensible case indefensible.

If both the attending physician and the consulting physician assume equal responsibility to communicate about and to followup the patient's condition and treatment, this will accomplish much in eliminating suits which result from lack of communication.

6. *Lack of competence:* A recently reported case demonstrated the liability risk of the attending physician for a patient referred to a surgeon. The surgeon mishandled the surgery and the referring physician was sued because of his referral. Obviously, there can be some risk if the consultant you recommend does not perform in a competent manner.

Following these simple guidelines can help minimize your involvement in a claim either as an attending or consulting physician. (*NORCAL Claims R_x*, Vol. 5, No. 3, July/August, 1984)

MIIENJ INAUGURATES NEWSLETTER

The Risk Prevention Department of the Medical Inter-Insurance Exchange of New Jersey recently has published its first newsletter, *The Specialty Reporter*, aimed specifically at a medical specialty. The objective is to keep physicians informed as to the causes of malpractice within their medical specialty. It is hoped that this will serve to prevent physicians from becoming involved in the same pitfalls which have led colleagues into a claim or suit.

The Reporter is to be published regularly, but will concentrate on different specialties each month. The first issue was entitled, *The Specialty Reporter for Anesthesia.* For more information regarding the newsletter, contact the Risk Prevention Department, Medical Inter-Insurance Exchange of New Jersey, P.O. Box 6470, Lawrenceville, NJ 08648.

PHYSICIAN/NURSE RESPONSIBILITIES

Shelly L. Ludwig, M.D., acting chief of the division of gastroenterology at UMDNJ, recommends a closer professional relationship between physician and nurses as a method toward the reduction of medical malpractice. Addressing members of the Society for Health Care Risk Management of New Jersey, Dr. Ludwig noted that a recent survey of nurses indicated that only 20 percent rated their working relationship with physicians to be excellent. This feeling is partially attributed to the traditional role that each performs in the care of patients. The physician views the patient in a holistic manner while the nurse is more task oriented in the approach to patient care.

Dr. Ludwig recommends a greater integration of physician/nurse responsibilities through a primary nursing care format. This would permit the nurse to become problem oriented as he/she follows the care of the patient through to recovery.

According to Dr. Ludwig, such an integration can result in better patient care, better utilization of staff, better working atmosphere, and a better opportunity to reduce the risk of malpractice.

TABLE

OR-Related Malpractice Claims

Claim	Number	Percentage	Average Cost
Surgery—postoperative complication	836	27.6	$32,285
Surgery—inadvertent act	346	11.4	38,294
Surgery—inappropriate procedure	236	7.8	37,424
Surgery—unnecessary	117	3.9	36,012
Surgery—complications from delay	110	3.6	21,548
Surgery—postoperative death	106	3.5	67,993
Improper treatment—fracture or dislocation	83	2.7	40,286
Anesthesia—cardiac arrest	79	2.6	103,949
Anesthesia—teeth damage	78	2.6	3,637
Anesthesia—adverse reaction	73	2.4	19,661
Surgery—sponge left	72	2.4	14,296
Surgery—wrong area	65	2.1	31,250
Miscellaneous—lack of informed consent	64	2.1	31,543
Anesthesia—undescribed catastrophe	63	2.1	61,878
Surgery—instrument left	53	1.8	19,674
All other allegations	643	21.3	
Total	3,024	100.0	$37,781

SURGERY TAKES BIGGEST SLICE OF CLAIMS

As you might expect, the largest group of malpractice claims originates in the hospital operating room. In the 20 months from May 1982 through December 1983, the St. Paul Fire and Marine Insurance Co. received 3,024 operating room-related claims, with settlements averaging $37,781. The most common allegation (27.6 percent) concerned postoperative complications. Both the costliest and least expensive claims related to anesthesia, cardiac arrest ($103,949), and damage to teeth ($3,637). The Table relates the company's complete breakdown. *(Medical World News/August 27, 1984)*

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Medicare Impact on Physician Hospital Contracts

VINCENT A. MARESSA, J.D.

New Jersey has not yet experienced the effect of TEFRA, but it is evident that TEFRA must be complied with by January 1985. An objective settlement of the TEFRA billing requirements is necessary.

The Tax Equity and Fiscal Responsibility Act of 1982 (TEFRA) has had a significant impact on physician-hospital contracts. New Jersey has not yet experienced the effect of TEFRA because its implementation here has been postponed. At this writing, however, it is evident that TEFRA must be complied with by January 1985.

The Medicare Program classifies direct physicians' services (i.e. diagnostic, therapeutic) to patients as Part B costs. Hospital costs such as teaching, research, administration, supervision, and services of general benefit to the hospital, and its patients are allocated to Part A. Pursuant to the requirements of TEFRA records, schedules, protocols, and other documents such as time allocations, must be maintained to substantiate the basis of physicians' services between Part A and Part B. Thus, in any instance where a physician receives any salary or reimbursement from a hospital, the Part A-Part B billing requirements must be met.

The billing arrangements can be complex. The agreement between the physician and hospital should detail the procedure and also provide latitude for modifications, which may become necessary when federal regulations change.

Either the physician or the hospital can perform the billing function. Payment methods include periodic advances against collections with regular adjustments with allowances for bad debt. Payment may be on an accrual basis, or direct, or an assignment.

A number of generalized billing sequences are possible:

1) Combined—where costs for Part A and charges for Part B services are included and identified individually;

2) Separate—where the hospital and physician bill Medicare separately; and

3) Split—where a combined billing system separated into two components when reporting costs to Medicare, where the hospital bills separately for the physician.

Physicians often prefer separate billings. Combined billing is of limited use because of the complexity of federal regulations. Hospitals may favor split billing.

Clearly, TEFRA provides an instance where even existing contracts must be reviewed. That review must be carefully conducted. A true "A-B" separation is not achieved easily with equity to both parties. Historically, Medicare reimbursement for hospital-based physicians may not have established an accurate data base for the required separation. The allocations for the services of the pathologist in particular presents a quandary, since fee-for-service billing in that specialty has not been prevalent in New Jersey.

Hospital administration and hospital-based salaried physicians should engage in a fair, open, and objective settlement of the TEFRA billing requirements.

*The material for this column is coedited by Arthur Krosnick, M.D., Editor, *The Journal*, MSNJ; Vincent A. Maressa, J.D., Executive Director, MSNJ; and James E. George, M.D., J.D., Director of Professional Liability, MSNJ.

BALANCED CALCIUM CHANNEL BLOCKADE!



Low incidence of side effects
CARDIZEM® (diltiazem HCl) produces an incidence of adverse reactions not greater than that reported with placebo therapy, thus contributing to the patient's sense of well-being.

*Cardizem is indicated in the treatment of angina pectoris due to coronary artery spasm and in the management of chronic stable angina (classic effort-associated angina) in patients who cannot tolerate therapy with beta-blockers and/or nitrates or who remain symptomatic despite adequate doses of these agents.

References:
1. Strauss WE, McIntyre KM, Parisi AF, et al: Safety and efficacy of diltiazem hydrochloride for the treatment of stable angina pectoris: Report of a cooperative clinical trial. Am J Cardiol 49:560-566, 1982.
2. Pool PE, Seagren SC, Bonanno JA, et al: The treatment of exercise-inducible chronic stable angina with diltiazem: Effect on treadmill exercise. Chest 78 (July suppl):234-238, 1980.

Reduces angina attack frequency*
42% to 46% decrease reported in multicenter study.[1]

Increases exercise tolerance*
In Bruce exercise test,[2] control patients averaged 8.0 minutes to onset of pain; Cardizem patients averaged 9.8 minutes ($P<.005$).

CARDIZEM®
(diltiazem HCl)

THE BALANCED CALCIUM CHANNEL BLOCKER

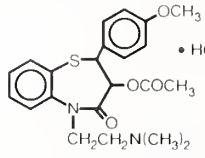
Please see full prescribing information on following page.

PROFESSIONAL USE INFORMATION

cardizem®
(diltiazem HCl)
30 mg and 60 mg tablets

DESCRIPTION

CARDIZEM® (diltiazem hydrochloride) is a calcium ion influx inhibitor (slow channel blocker or calcium antagonist). Chemically, diltiazem hydrochloride is 1,5-Benzothiazepin-4(5H)one,3-(acetyloxy) -5-[2-(dimethylamino)ethyl]-2,3-dihydro-2-(4-methoxyphenyl)-, monohydrochloride,(+) -cis-. The chemical structure is:



Diltiazem hydrochloride is a white to off-white crystalline powder with a bitter taste. It is soluble in water, methanol, and chloroform. It has a molecular weight of 450.98. Each tablet of CARDIZEM contains either 30 mg or 60 mg diltiazem hydrochloride for oral administration.

CLINICAL PHARMACOLOGY

The therapeutic benefits achieved with CARDIZEM are believed to be related to its ability to inhibit the influx of calcium ions during membrane depolarization of cardiac and vascular smooth muscle.

Mechanisms of Action. Although precise mechanisms of its antianginal actions are still being delineated, CARDIZEM is believed to act in the following ways:

1. Angina Due to Coronary Artery Spasm: CARDIZEM has been shown to be a potent dilator of coronary arteries both epicardial and subendocardial. Spontaneous and ergonovine-induced coronary artery spasm are inhibited by CARDIZEM.
2. Exertional Angina: CARDIZEM has been shown to produce increases in exercise tolerance, probably due to its ability to reduce myocardial oxygen demand. This is accomplished via reductions in heart rate and systemic blood pressure at submaximal and maximal exercise work loads.

In animal models, diltiazem interferes with the slow inward (depolarizing) current in excitable tissue. It causes excitation-contraction uncoupling in various myocardial tissues without changes in the configuration of the action potential. Diltiazem produces relaxation of coronary vascular smooth muscle and dilation of both large and small coronary arteries at drug levels which cause little or no negative inotropic effect. The resultant increases in coronary blood flow (epicardial and subendocardial) occur in ischemic and nonischemic models and are accompanied by dose-dependent decreases in systemic blood pressure and decreases in peripheral resistance.

Hemodynamic and Electrophysiologic Effects. Like other calcium antagonists, diltiazem decreases sinoatrial and atrioventricular conduction in isolated tissues and has a negative inotropic effect in isolated preparations. In the intact animal, prolongation of the AH interval can be seen at higher doses.

In man, diltiazem prevents spontaneous and ergonovine-provoked coronary artery spasm. It causes a decrease in peripheral vascular resistance and a modest fall in blood pressure and, in exercise tolerance studies in patients with ischemic heart disease, reduces the heart rate-blood pressure product for any given work load. Studies to date, primarily in patients with good ventricular function, have not revealed evidence of a negative inotropic effect; cardiac output, ejection fraction, and left ventricular end diastolic pressure have not been affected. There are as yet few data on the interaction of diltiazem and beta-blockers. Resting heart rate is usually unchanged or slightly reduced by diltiazem.

Intravenous diltiazem in doses of 20 mg prolongs AH conduction time and AV node functional and effective refractory periods approximately 20%. In a study involving single oral doses of 300 mg of CARDIZEM in six normal volunteers, the average maximum PR prolongation was 14% with no instances of greater than first-degree AV block. Diltiazem-associated prolongation of the AH interval is not more pronounced in patients with first-degree heart block. In patients with sick sinus syndrome, diltiazem significantly prolongs sinus cycle length (up to 50% in some cases).

Chronic oral administration of CARDIZEM in doses of up to 240 mg/day has resulted in small increases in PR interval, but has not usually produced abnormal prolongation. There were, however, three instances of second-degree AV block and one instance of third-degree AV block in a group of 959 chronically treated patients.

Pharmacokinetics and Metabolism. Diltiazem is absorbed from the tablet formulation to about 80% of a reference capsule and is subject to an extensive first-pass effect, giving an absolute bioavailability (compared to intravenous dosing) of about 40%. CARDIZEM undergoes extensive hepatic metabolism in which 2% to 4% of the unchanged drug appears in the urine. In vitro binding studies show CARDIZEM is 70% to 80% bound to plasma proteins. Competitive ligand binding studies have also shown CARDIZEM binding is not altered by therapeutic concentrations of digoxin, hydrochlorothiazide, phenylbutazone, propranolol, salicylic acid, or warfarin. Single oral doses of 30 to 120 mg of CARDIZEM result in detectable plasma levels within 30 to 60 minutes and peak plasma levels two to three hours after drug administration. The plasma elimination half-life following single or multiple drug administration is approximately 3.5 hours. Desacetyl diltiazem is also present in the plasma at levels of 10% to 20% of the parent drug and is 25% to 50% as potent a coronary vasodilator as diltiazem. Therapeutic blood levels of CARDIZEM appear to be in the range of 50 to 200 ng/ml. There is a departure from dose-linearity when single doses above 60 mg are given; a 120-mg dose gave blood levels three times that of the 60-mg dose. There is no information about the effect of renal or hepatic impairment on excretion or metabolism of diltiazem.

INDICATIONS AND USAGE

1. **Angina Pectoris Due to Coronary Artery Spasm.** CARDIZEM is indicated in the treatment of angina pectoris due to coronary artery spasm. CARDIZEM has been shown effective in the treatment of spontaneous coronary artery spasm presenting as Prinzmetal's variant angina (resting angina with ST-segment elevation occurring during attacks).
2. **Chronic Stable Angina (Classic Effort-Associated Angina).** CARDIZEM is indicated in the management of chronic stable angina. CARDIZEM has been effective in controlled trials in reducing angina frequency and increasing exercise tolerance.

There are no controlled studies of the effectiveness of the concomitant use of diltiazem and beta-blockers or of the safety of this combination in patients with impaired ventricular function or conduction abnormalities.

CONTRAINDICATIONS

CARDIZEM is contraindicated in (1) patients with sick sinus syndrome except in the presence of a functioning ventricular pacemaker, (2) patients with second- or third-degree AV block except in the presence of a functioning ventricular pacemaker, and (3) patients with hypotension (less than 90 mm Hg systolic).

WARNINGS

1. **Cardiac Conduction.** CARDIZEM prolongs AV node refractory periods without significantly prolonging sinus node recovery time, except in patients with sick sinus syndrome. This effect may rarely result in abnormally slow heart rates (particularly in patients with sick sinus syndrome) or second- or third-degree AV block (six of 1243 patients for 0.48%). Concomitant use of diltiazem with beta-blockers or digitalis may result in additive effects on cardiac conduction. A patient with Prinzmetal's angina developed periods of asystole (2 to 5 seconds) after a single dose of 60 mg of diltiazem.
2. **Congestive Heart Failure.** Although diltiazem has a negative inotropic effect in isolated animal tissue preparations, hemodynamic studies in humans with normal ventricular function have not shown a reduction in cardiac index nor consistent negative effects on contractility (dp/dt). Experience with the use of CARDIZEM alone or in combination with beta-blockers in patients with impaired ventricular function is very limited. Caution should be exercised when using the drug in such patients.
3. **Hypotension.** Decreases in blood pressure associated with CARDIZEM therapy may occasionally result in symptomatic hypotension.
4. **Acute Hepatic Injury.** In rare instances, patients receiving CARDIZEM have exhibited reversible acute hepatic injury as evidenced by moderate to extreme elevations of liver enzymes. (See PRECAUTIONS and ADVERSE REACTIONS.)

PRECAUTIONS

General. CARDIZEM (diltiazem hydrochloride) is extensively metabolized by the liver and excreted by the kidneys and in bile. As with any new drug given over prolonged periods, laboratory parameters should be monitored at regular intervals. The drug should be used with caution in patients with impaired renal or hepatic function. In subacute and chronic dog and rat studies designed to produce toxicity, high doses of diltiazem were associated with hepatic damage. In special subacute hepatic studies, oral doses of 125 mg/kg and higher in rats were associated with histological changes in the liver which were reversible when the drug was discontinued. In dogs, doses of 20 mg/kg were also associated with hepatic changes; however, these changes were reversible with continued dosing.

Drug Interaction. Pharmacologic studies indicate that there may be additive effects in prolonging AV conduction when using beta-blockers or digitalis concomitantly with CARDIZEM. (See WARNINGS).

Controlled and uncontrolled domestic studies suggest that concomitant use of CARDIZEM and beta-blockers or digitalis is usually well tolerated. Available data are not sufficient, however, to predict the effects of concomitant treatment, particularly in patients with left ventricular dysfunction or cardiac conduction abnormalities. In healthy volunteers, diltiazem has been shown to increase serum digoxin levels up to 20%.

Carcinogenesis, Mutagenesis, Impairment of Fertility. A 24-month study in rats and a 21-month study in mice showed no evidence of carcinogenicity. There was also no mutagenic response in in vitro bacterial tests. No intrinsic effect on fertility was observed in rats.

Pregnancy. Category C. Reproduction studies have been conducted in mice, rats, and rabbits. Administration of doses ranging from five to ten times greater (on a mg/kg basis) than the daily recommended therapeutic dose has resulted in embryo and fetal lethality. These doses, in some studies, have been reported to cause skeletal abnormalities. In the perinatal/postnatal studies, there was some reduction in early individual pup weights and survival rates. There was an increased incidence of stillbirths at doses of 20 times the human dose or greater.

There are no well-controlled studies in pregnant women; therefore, use CARDIZEM in pregnant women only if the potential benefit justifies the potential risk to the fetus.

Nursing Mothers. It is not known whether this drug is excreted in human milk. Because many drugs are excreted in human milk, exercise caution when CARDIZEM is administered to a nursing woman if the drug's benefits are thought to outweigh its potential risks in this situation.

Pediatric Use. Safety and effectiveness in children have not been established.

ADVERSE REACTIONS

Serious adverse reactions have been rare in studies carried out to date, but it should be recognized that patients with impaired ventricular function and cardiac conduction abnormalities have usually been excluded.

In domestic placebo-controlled trials, the incidence of adverse reactions reported during CARDIZEM therapy was not greater than that reported during placebo therapy.

The following represent occurrences observed in clinical studies which can be at least reasonably associated with the pharmacology of calcium influx inhibition. In many cases, the relationship to CARDIZEM has not been established. The most common occurrences, as well as their frequency of presentation, are: edema (2.4%), headache (2.1%), nausea (1.9%), dizziness (1.5%), ra… asthenia (1.2%), AV block (1.1%). In addition, the follow… were reported infrequently (less than 1%) with the order o… tion corresponding to the relative frequency of occurrenc…

Cardiovascular:	Flushing, arrhythmia, hypotension, a… dia, palpitations, congestive hea… syncope.
Nervous System:	Paresthesia, nervousness, son… tremor, insomnia, hallucinations, an…
Gastrointestinal:	Constipation, dyspepsia, diarrhea, … mild elevations of alkaline phosphat… SGPT, and LDH.
Dermatologic:	Pruritus, petechiae, urticaria, photos…
Other:	Polyuria, nocturia.

The following additional experiences have been noted:

A patient with Prinzmetal's angina experiencing ep… vasospastic angina developed periods of transient asy… asystole approximately five hours after receiving a sin… dose of CARDIZEM.

The following postmarketing events have been repo… quently in patients receiving CARDIZEM: erythema multif… kopenia; and extreme elevations of alkaline phosphata… SGPT, LDH, and CPK. However, a definitive cause and effec… these events and CARDIZEM therapy is yet to be establi…

OVERDOSAGE OR EXAGGERATED RESPONS…

Overdosage experience with oral diltiazem has been … Single oral doses of 300 mg of CARDIZEM have been well … by healthy volunteers. In the event of overdosage or exa… response, appropriate supportive measures should be em… addition to gastric lavage. The following measures may be co…

Bradycardia	Administer atropine (0.60 to 1.0 mg … is no response to vagal blockade, a… isoproterenol cautiously.
High-Degree AV Block	Treat as for bradycardia above. Fi… degree AV block should be treated … diac pacing.
Cardiac Failure	Administer inotropic agents (isopr… dopamine, or dobutamine) and diuret…
Hypotension	Vasopressors (eg, dopamine or lev… bitartrate).

Actual treatment and dosage should depend on the sever… clinical situation and the judgment and experience of the … physician.

The oral/LD_{50}'s in mice and rats range from 415 to 74… and from 560 to 810 mg/kg, respectively. The intravenous … these species were 60 and 38 mg/kg, respectively. The ora… dogs is considered to be in excess of 50 mg/kg, while leth… seen in monkeys at 360 mg/kg. The toxic dose in man is no… but blood levels in excess of 800 ng/ml have not been as… with toxicity.

DOSAGE AND ADMINISTRATION

Exertional Angina Pectoris Due to Atherosclerot… nary Artery Disease or Angina Pectoris at Rest Due … nary Artery Spasm. Dosage must be adjusted to each … needs. Starting with 30 mg four times daily, before meal… bedtime, dosage should be increased gradually (given in… doses three or four times daily) at one- to two-day interv… optimum response is obtained. Although individual patie… respond to any dosage level, the average optimum dosag… appears to be 180 to 240 mg/day. There are no available data … ing dosage requirements in patients with impaired renal or … function. If the drug must be used in such patients, titration s… carried out with particular caution.

Concomitant Use With Other Antianginal Agents:

1. **Sublingual NTG** may be taken as required to abo… anginal attacks during CARDIZEM therapy.
2. **Prophylactic Nitrate Therapy**—CARDIZEM may b… coadministered with short- and long-acting nitrates, b… have been no controlled studies to evaluate the ant… effectiveness of this combination.
3. **Beta-blockers.** (See WARNINGS and PRECAUTIONS.)

HOW SUPPLIED

Cardizem 30-mg tablets are supplied in bottles of 10… 0088-1771-47) and in Unit Dose Identification Paks of 10… 0088-1771-49). Each green tablet is engraved with MARION … side and 1771 engraved on the other. CARDIZEM 60-mg … tablets are supplied in bottles of 100 (NDC 0088-1772-47) an… Dose Identification Paks of 100 (NDC 0088-1772-49). Each … tablet is engraved with MARION on one side and 1772 on th…

Issued …

Another patient benefit product from

PHARMACEUTICAL DIVISION
MARION LABORATORIES, INC.
KANSAS CITY, MISSOURI 64137

The New Jersey Ethical Pharmaceutical Industry

New Jersey has one of the strongest health-related industries in the United States. It is dedicated to the research, development, manufacture, and sale of pharmaceutical products, biologicals, and biomedical devices.

New Jersey has one of the strongest health-related industries in the United States. It is dedicated to the research, development, manufacture, and sale of pharmaceutical products, biologicals, and biomedical devices.

Obviously, these corporations serve our patients and our citizens—just as similar firms outside our state do. In saluting the New Jersey industry (page 19), we also are expressing good will to the entire body of ethical pharmaceutical corporations.

The ethical pharmaceutical industry is a hand-in-hand partner with the medical profession. We could not exist without them. All physicians can recite a laundry list of their contributions, but it is useful to cite some of them:

1. Research and development of new pharmaceutical products and biomedical devices.

2. Gigantic expenditures of money and scientific and support staff resources, effort, and time to satisfy the Food and Drug Administration (FDA) requirements for approval of new products and devices.

3. Willingness to pursue ethical advertising of their products in an interesting way to physicians and other health professionals, utilizing unique and expensive graphic, audio-visual, and print media, as well as personal one-to-one contact.

4. Major educational programs for health professionals exist because the corporations sponsor lectures, courses, and symposia; they publish and distribute without charge books, educational pamphlets, and brochures for professional instruction.

5. The ethical houses are engaged in public health education, through nationwide telecommunications programs and newspaper and radio messages.

6. Companies make a substantial effort to improve medical journalism in the United States by sponsoring numerous medical writing and publishing workshops and newsletters with information.

7. Many of the pharmaceutical/medical device manufacturers have active patient education programs using the print and audio-visual media and other techniques which are developed for use by physicians, nurses, nutritionists, health educators, and others.

8. Pharmaceutical corporations have assisted New Jersey's unique diabetes tapes-by-phone program for patients and their families, developed by the American Diabetes Association, New Jersey Affiliate.

9. They have made special grants for the development of unique ventures in education and information, such as our *William Carlos Williams Commemorative Issue* in September 1983.

In this issue, we have organized summary statements which, of necessity, are brief, for a sampling of New Jersey corporations. These organizations help our state, our patients, and us. We are grateful to the New Jersey health-related ethical pharmaceutical and device manufacturers and wish them continued success.

A.K.

Did You Know . . .

Read this editorial and see if you are up to date on health care practices in New Jersey.

The federal government has changed the professional standards review organization (PSRO) to a new organization, the peer review organization (PRO)? Under the Peer Review Improvement Act, the Health Care Financing Adminstration (HCFA) has funded the PRO of New Jersey to the tune of $8 million. Although the Board of the PRO is made up of physicians, there is no member of the MSNJ Board or cadre of officers on the Board. HCFA has a two-year contract with the PRO, which will receive payments as long as it achieves results and generates required reports. The review of Medicare patients will be conducted by representatives of NJPRO "on a nondelegated basis, retrospective to the patient's discharge, and in accordance with precontracted denial targets or objectives." Physicians who question denials by PRO will only be able to appeal decisions "through a request for a reconsideration of reasonableness, medical necessity, or appropriateness."

The New Jersey State Department of Health has requested a new waiver for the state's Medicare (DRG) waiver which expired on December 31, 1984? Should the request be denied, New Jersey will go on the same Medicare DRG program as the rest of the country. Both the NJSDH and the New Jersey Hospital Association believe New Jersey hospitals will be worse off under the national program than under the existing one.

According to the New Jersey Chapter of the American Academy of Pediatrics, Medicaid reimbursement for an injection of polio vaccine or DPT vaccine is $4.00? The wholesale cost of the vaccines alone to the physician are $4.50 for polio vaccine and more than $4.00 for DPT vaccine. The Board of MSNJ passed a resolution and plans to urge "Governor Kean to find a solution to the problem of insufficient Medicaid reimbursement for pertussis and polio immunizations, inasmuch as the present situation will result in children not receiving the benefit of immunization."

"Colocation" is the buzz word for hospital reorganization in Newark? An $88 million, five-year plan will relocate the United Hospitals Medical Center to UMDNJ's Newark campus adjacent to University Hospital. The new facility will have approximately 765 beds.

Whether or not New Jersey receives a new Medicare DRG waiver for 1985, hospital-based physicians must comply with TEFRA regulations for Medicare beginning January 1, 1985? These regulations consider all hands-on services by hospital physicians as "fee-for-service" patient care. This means all hospital-based physicians must bill separately for their professional services, which no longer will be included in the Medicare DRG rate.

The 219th Annual Meeting of the Medical Society of New Jersey will be held May 2 to 5, 1985, at the Americana Host Farm Resort, Lancaster, Pennsylvania?

The Board of Medical Examiners indicated that a chiropractor may order but may not perform bioanalytical tests that are consistent with chiropractic practice? In the event such tests are beyond the laboratory reference range (i.e. they are abnormal) and the condition is not amenable to chiropractic care, the patient must be referred to a qualified licensed physician, preferably of the patient's choice.

Census figures show that seven states now have more than 1 million residents over the age of 65? The elderly population is growing at an annual rate of 7.2 percent, compared with 3.3 percent for the U.S. population as a whole. The population over age 85 now is about 2 million and is expected to grow to 5.4 million by the year 2000. For the 85 and older age group, women outnumber men by a ratio of 10:4. The 85 and older age group significantly has more health problems than the rest of the population. Although they represent less than 1 percent of the total population, they occupy more than 20 percent of the nation's nursing home beds.

If you didn't know the above, you do now. Keep reading!

A.K.

Angina comes in many forms...



So does

SORBITRATE®

(ISOSORBIDE DINITRATE)

Unsurpassed flexibility in nitrate therapy.



2.5 mg 5 mg 10 mg
Sublingual Tablets

5 mg 10 mg
Chewable Tablets

5 mg 10 mg 20 mg 30 mg 40 mg
Oral "Swallow" Tablets

40 mg
Sustained Action "Swallow" Tablets

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See following page for brief summary of prescribing information.

SORBITRATE®
(ISOSORBIDE DINITRATE)

Please consult full prescribing information before use. A summary follows:

INDICATIONS AND USAGE: SORBITRATE (isosorbide dinitrate) is indicated for the treatment and prevention of angina pectoris. All dosage forms of isosorbide dinitrate may be used prophylactically to decrease frequency and severity of anginal attacks and can be expected to decrease the need for sublingual nitroglycerin.

The sublingual and chewable forms of the drug are indicated for acute prophylaxis of angina pectoris when taken a few minutes before situations likely to provoke anginal attacks. Because of a slower onset of effect, the oral forms of isosorbide dinitrate are not indicated for acute prophylaxis.

CONTRAINDICATIONS: SORBITRATE is contraindicated in patients who have shown purported hypersensitivity or idiosyncrasy to it or other nitrates or nitrites. Epinephrine and related compounds are ineffective in reversing the severe hypotensive events associated with overdose and are contraindicated in this situation.

WARNINGS: The benefits of SORBITRATE during the early days of an acute myocardial infarction have not been established. If one elects to use organic nitrates in early infarction, hemodynamic monitoring and frequent clinical assessment should be used because of the potential deleterious effects of hypotension.

PRECAUTIONS: General: Severe hypotensive response, particularly with upright posture, may occur with even small doses of SORBITRATE. The drug should therefore be used with caution in subjects who may have blood volume depletion from diuretic therapy or in subjects who have low systolic blood pressure (eg, below 90 mmHg). Paradoxical bradycardia and increased angina pectoris may accompany nitrate-induced hypotension. Nitrate therapy may aggravate the angina caused by hypertrophic cardiomyopathy.

Marked symptomatic, orthostatic hypotension has been reported when calcium channel blockers and organic nitrates were used in combination. Dose adjustment of either class of agents may be necessary.

Tolerance to this drug and cross-tolerance to other nitrates and nitrites may occur. Tolerance to the vascular and antianginal effects of isosorbide dinitrate or nitroglycerin has been demonstrated in clinical trials, experience through occupational exposure, and in isolated tissue experiments in the laboratory. The importance of tolerance to the appropriate use of isosorbide dinitrate in the management of patients with angina pectoris has not been determined. However, one clinical trial using treadmill exercise tolerance (as an end point) found an 8-hour duration of action of oral isosorbide dinitrate following the first dose (after a 2-week placebo washout) and only a 2-hour duration of effect of the same dose after 1 week of repetitive dosing at conventional dosing intervals. On the other hand, several trials have been able to differentiate isosorbide dinitrate from placebo after 4 weeks of therapy and, in open trials, an effect seems detectable for as long as several months.

Tolerance clearly occurs in industrial workers continuously exposed to nitroglycerin. Moreover, physical dependence also occurs since chest pain, acute myocardial infarction, and even sudden death have occurred during temporary withdrawal of nitroglycerin from the workers. In clinical trials in angina patients, there are reports of anginal attacks being more easily provoked and of rebound in the hemodynamic effects soon after nitrate withdrawal. The relative importance of these observations to the routine, clinical use of isosorbide dinitrate is not known. However, it seems prudent to gradually withdraw patients from isosorbide dinitrate when the therapy is being terminated, rather than stopping the drug abruptly.

Information for Patients: Headache may occur during initial therapy with SORBITRATE. Headache is usually relieved by the use of standard headache remedies or by lowering the dose and tends to disappear after the first week or two of use.

Drug Interactions: Alcohol may enhance any marked sensitivity to the hypotensive effect of nitrates.

Isosorbide dinitrate acts directly on vascular smooth muscle; therefore, any other agent that depends on vascular smooth muscle as the final common path can be expected to have decreased or increased effect depending on the agent.

Carcinogenesis, Mutagenesis, Impairment of Fertility: No long-term studies in animals have been performed to evaluate the carcinogenic potential of this drug. A modified two-litter reproduction study in rats fed isosorbide dinitrate at 25 or 100 mg/kg/day did not reveal any effects on fertility or gestation or any remarkable gross pathology in any parent or offspring fed isosorbide dinitrate as compared with rats fed a basal-controlled diet.

Pregnancy Category C: Isosorbide dinitrate has been shown to cause a dose-related increase in embryotoxicity (increase in mummified pups) in rabbits at oral doses 35 and 150 times the maximum recommended human daily dose. There are no adequate and well-controlled studies in pregnant women. SORBITRATE should be used during pregnancy only if the potential benefit justifies the potential risk to the fetus.

Nursing Mothers: It is not known whether this drug is excreted in human milk. Because many drugs are excreted in human milk, caution should be exercised when SORBITRATE is administered to a nursing woman.

Pediatric Use: The safety and effectiveness of SORBITRATE in children has not been established.

ADVERSE REACTIONS: Adverse reactions, particularly headache and hypotension, are dose-related. In clinical trials at various doses, the following have been observed:

Headache is the most common (reported incidence varies widely, apparently being dose-related, with an average occurrence of about 25%) adverse reaction and may be severe and persistent. Cutaneous vasodilation with flushing may occur. Transient episodes of dizziness and weakness, as well as other signs of cerebral ischemia associated with postural hypotension, may occasionally develop (the incidence of reported symptomatic hypotension ranges from 2% to 36%). An occasional individual will exhibit marked sensitivity to the hypotensive effects of nitrates and severe responses (nausea, vomiting, weakness, restlessness, pallor, perspiration, and collapse) may occur even with the usual therapeutic dose. Drug rash and/or exfoliative dermatitis may occasionally occur. Nausea and vomiting appear to be uncommon. Case reports of clinically significant methemoglobinemia are rare at conventional doses of organic nitrates. The formation of methemoglobin is dose-related and, in the case of genetic abnormalities of hemoglobin that favor methemoglobin formation, even conventional doses of organic nitrate could produce harmful concentrations of methemoglobin.

DOSAGE AND ADMINISTRATION: For the treatment of angina pectoris, the usual starting dose for sublingual SORBITRATE is 2.5 to 5 mg; for chewable tablets, 5 mg; for oral (swallowed) tablets, 5 to 20 mg; and for controlled-release forms, 40 mg.

SORBITRATE should be titrated upward until angina is relieved or side effects limit the dose. In ambulatory patients, the magnitude of the incremental dose increase should be guided by measurements of standing blood pressure.

The initial dosage of sublingual or chewable SORBITRATE for prophylactic therapy in angina pectoris patients is generally 5 or 10 mg every 2 to 3 hours. Adequate controlled clinical studies demonstrating the effectiveness of chronic maintenance therapy with these dosage forms have not been reported.

SORBITRATE in oral doses of 10 to 40 mg given every 6 hours or in oral controlled-release doses of 40 to 80 mg given every 8 to 12 hours is generally recommended. The extent to which development of tolerance should modify the dosage program has not been defined. *The oral controlled-release forms of isosorbide dinitrate should not be chewed.*

DOSAGE FORMS AVAILABLE: Sublingual Tablets (2.5, 5, 10 mg); Chewable Tablets (5, 10 mg); Oral Tablets (5, 10, 20, 30, 40 mg); Sustained Action Tablets (40 mg).

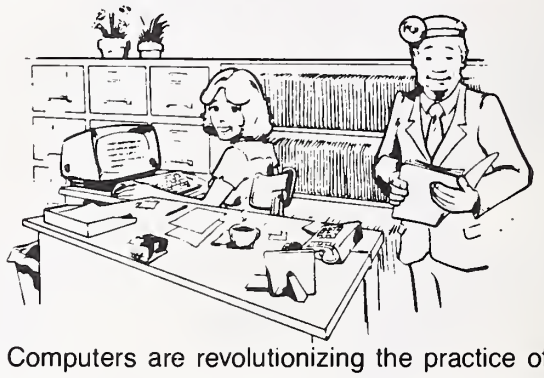
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NEW JERSEY'S PHARMACEUTICAL INDUSTRY

By GERALDINE HUTNER*

The pharmaceutical industry in New Jersey is very healthy. This good health allows the Garden State to be a worldwide leader in the industry. These important ethical corporations (Table) are major employers, major taxpayers, and primary innovators and implementors of good health-promoting agents, medical equipment, and technology. The concentration of earnings by this major industry in our state is massive and very important to our state and its citizens. Although they are located in New Jersey, these corporations serve a worldwide contingency.

We salute the very important ethical pharmaceutical industry in the Garden State. To acquaint you with these growing health-care promoters, we offer a sampling of the ethical pharmaceutical houses in our state. Although we cannot describe all the companies, we believe our representation will give you an overview of this fine industry.

CIBA-GEIGY CORPORATION

CIBA-GEIGY Corporation of Summit is a leader in the field of cardiovascular and antihypertensive therapies as well as an emerging leader in advanced drug delivery systems. CIBA-GEIGY employs approximately 2,000 persons statewide. Their major pharmaceutical product groups include drugs for arthritis, allergy, hypertension, cardiovascular diseases, tuberculosis and viral diseases, and psychotherapeutic drugs.

CIBA-GEIGY has made major contributions toward treatment of chronic diseases and infectious diseases. For example, to combat hypertension, the Pharmaceuticals Division offers the widest range of antihypertensive medications available in this country. The emphasis is significant, since morbidity caused by hypertension underlies more than half of the adult deaths in the United States. Many physicians consider hypertension to be the nation's major health problem because of its role in strokes, heart attacks, and kidney disease. CIBA-GEIGY also is noted for its emphasis on pharmacodynamics, i.e. the study of the action of drugs and their metabolic products on cellular function.

Research by CIBA-GEIGY into new dosage forms has resulted in the development of systems that deliver pharmacologically active substances on a controlled-release basis. With Alza Corporation of Palo Alto, California, CIBA-GEIGY pioneered the concept of rate-controlled drug delivery through the skin. One such product is the motion sickness prevention disc Transderm® Scōp (scopolamine). Transderm® Scōp (Figure 1) helps

*Ms. Hutner is Managing Editor, *The Journal*, MSNJ. Correspondence may be addressed to Two Princess Road, Lawrenceville, NJ 08648.

NEW JERSEY'S PHARMACEUTICAL HOUSES

American Dermal Corporation
Beecham Laboratories
Berlex Laboratories Inc.
Biocraft Laboratories, Inc.
The Carlton Corporation
Carnrick Laboratories
Cetylite Industries, Inc.
CIBA-GEIGY Corporation
Dorsey Pharmaceuticals
Elkins-Sinn, Inc.
Everett Laboratories, Inc.
Gilbert Laboratories
Glenwood, Inc.
Hoechst-Roussel Pharmaceuticals Incorporated
Hoffmann-La Roche, Inc.
Holland-Rantos Company, Inc.
Jacobus Pharmaceutical Company, Inc.
Janssen Pharmaceutica, Inc.
Johnson & Johnson
Knoll Pharmaceutical Company
Lactaid, Inc.
Lederle Laboratories
Leeming Laboratories
Leeming Division, Pfizer, Inc.
Merck & Company, Inc.
Organon Pharmaceuticals
Ortho Diagnostic Systems, Inc.
Parke-Davis/Warner-Lambert
Pharmacia Laboratories
Reed & Carnrick
Roche Laboratories
Rystan Company, Inc.
Sandoz, Inc.
Schering-Plough
Sclavo, Inc.
Squibb Corporation
Squibb/Connaught, Inc.
Squibb-Novo, Inc.
Wallace Laboratories
Youngs Drug Products Corp.

provide protection against motion sickness by delivering the drug, scopolamine, through the skin at a consistent, controlled rate.

ELKINS-SINN, INC.

Located on an eight-acre site in Cherry Hill, Elkins-Sinn, Inc. is a subsidiary of A.H. Robins Company. Formed in 1968, Elkins-Sinn, Inc. specializes in the manufacture and marketing of sterile drug products in packaging configurations convenient to hospital pharmacists. The company's first goal was achieved in 1970 when they purchased the rights to the Dosette® (unit-of-use) vial line.

Since 1976, Elkins-Sinn, Inc., together with A.H. Robins Company has one objective: to produce injectable products with the highest quality that is technologically possible while considering cost constraints.

Elkins-Sinn, Inc. is especially proud of their labeling program—controlled by a committee of six pharmacists and an inhouse printing department. The company knows that the product name and potency must stand out and that labels must be resistant to solvents as well as easy to read, clear, concise, and distinctive.

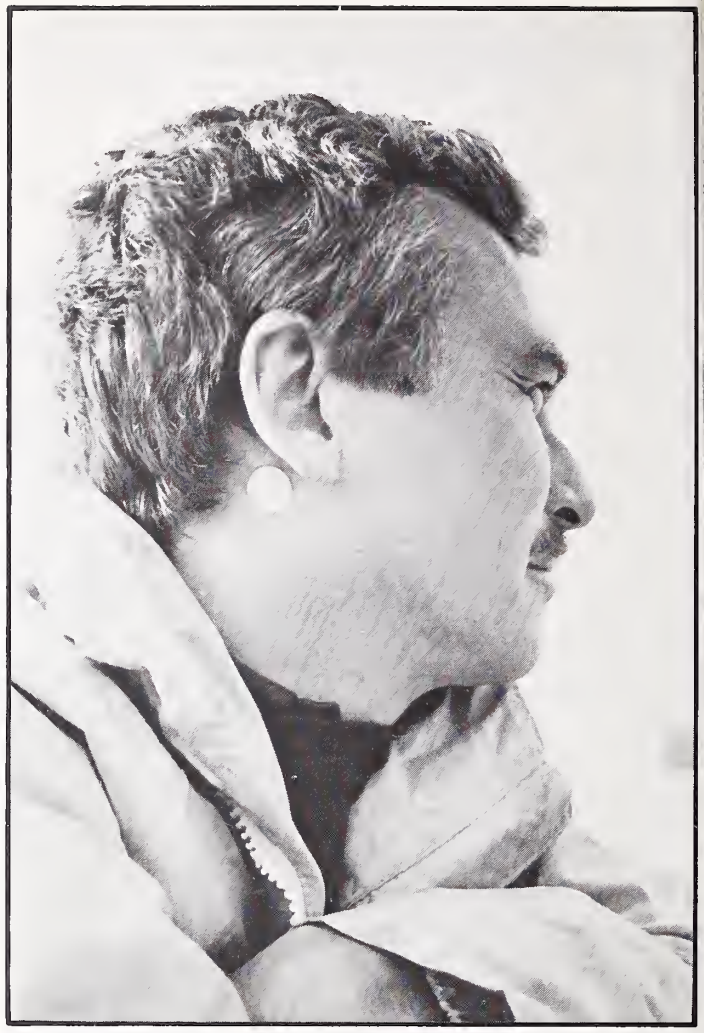


Figure 1—For motion sickness medication that one can wear, rather than swallow, is an effective and clinically tested revolutionary adhesive disc called Transderm® Scōp.

With a long list of available products, mention of a few would be appropriate: Dextrose Injection, Digoxin Injection, Heparin Sodium Injection, Lidocaine HCl Injection, and Phenobarbital Sodium Injection.

HOECHST-ROUSSEL PHARMACEUTICALS INCORPORATED

Hoechst-Roussel Pharmaceuticals Incorporated is a subsidiary of the American Hoechst Corporation and Roussel Uclaf S.A., Paris. All of the company's research, production, and distribution facilities are in Somerville, and 1,300 persons are employed.

Approximately 250 people in the New Jersey-based company are involved in pharmaceutical and clinical research. Their research efforts are concentrated on the development of anti-inflammatory/analgesic, antihypertensive, central nervous system, and antiglaucoma agents.

The current major products of Hoechst-Roussel Pharmaceuticals Incorporated include: Lasix®, a widely-prescribed diuretic for mobilization of edema of varied origin; Claforan®, a third-generation cephalosporin antibiotic with a broad spectrum of activity and distinguished safety profile making it particularly useful for treating serious hospital-acquired infections; Topicort®, a topical corticosteroid with a highly-regarded emollient cream base for dermatological use; Loprox®, a tropical antifungal agent with broad spectrum activity and rapid onset of action; Dox-

idan®, a laxative/stool softener; Streptase®, a fibrinolytic agent used to dissolve blood clots in lungs, deep veins, and arteries, including thrombi associated with myocardial infarction; and Relefact® TRH, an in vivo diagnostic aid for assessing thyroid function.

In addition to its present production line, Hoechst-Roussel Pharmaceuticals Incorporated is awaiting FDA approval for seven products and has 20 investigational new drug applications on file.

HOFFMANN-LA ROCHE, INC.

Hoffmann-La Roche Inc., one of the largest companies devoted to improving the quality of health care, is dedicated to research, production, and marketing of pharmaceuticals and other medical products and services. Roche has made major contributions to the medical community and the public in the treatment of cancer, mental illness, infectious diseases, tuberculosis, skin disorders, Parkinson's disease, and cardiovascular diseases.

Starting in the United States with only 15 employees in 1905, with headquarters in Nutley, Roche has grown to be one of New Jersey's largest employers.

Roche's vitamin research led to the introduction in 1978 of Rocaltrol® (calcitriol), a vitamin D metabolite used to treat hypocalcemia; the product now is being investigated for additional uses. Roche's interest in vitamin C includes recent and continuing studies on the role it plays in the body's immune system. In another area of vitamin C research, Roche scientists recently demonstrated that it prevents the formation of carcinogenic nitrosamines from the reaction of nitrites and amines, an effect later verified in human experiments by other researchers.

In 1949, Roche introduced Gantrisin® (sulfísoxazole), the first highly soluble sulfonamide which prevented macrocrystalization in the kidneys. This first Roche antibacterial agent was followed by Gantanol®, Trimpex®, and Bactrim™. Since its introduction in 1973 for the treatment of urinary tract infections due to susceptible strains of certain organisms, Bactrim™ has been shown effective for additional indications, including *Pneumocystis carinii*, pneumonitis, otitis media, and shigellosis.

The first of Roche's search for benzodiazepines was Librium®. Immediately, scientists at Roche began the painstaking task of screening over 5,000 analogs of Librium, which soon led to the discovery of Valium®. Studies with this class of compounds continued and Dalmane® and Clonopin® soon were discovered and marketed.

Compared with the barbiturates and meprobamate which preceded them, the antianxiety, anticonvulsant, and sedative-hypnotic properties of the benzodiazepines afforded a major therapeutic advantage in treating psychological and somatic conditions. These medications provided a marked increase in efficacy and safety over any other medications available to treat these illnesses. Benzodiazepines, today, are the most commonly prescribed tranquilizers.

Projects at Roche include the search for new products to treat cardiovascular diseases, arthritis, and gastrointestinal disorders.

JOHNSON & JOHNSON

Today, Johnson & Johnson is a worldwide family of 150 companies, based in 50 countries, with products sold in 149 nations. Its national headquarters is in New Brunswick.

The company's more than 77,000 employees are engaged in producing products that serve a broad segment of medical needs—ranging from baby care, first-aid, and hospital products, to ethical pharmaceuticals, diagnostics, and products relating to family planning, dental care, dermatology, and feminine hygiene.

Johnson & Johnson's tradition of decentralization has led to a group of affiliate companies which have made their mark in the medical marketplace. These companies include: Cilag (primarily producing dermatologicals, particularly in the field of mycology and acne, followed by analgesics and drugs for use in rheumatology and gynecology); Janssen Pharmaceutica (creating important drugs for major therapeutic fields including anesthesiology, parasitology, veterinary medicine, psychiatry, dermatology, and internal medicine); McNeil Pharmaceutical (providing prescription drugs including analgesics, major tranquilizers, anti-inflammatory agents, and muscle relaxants); Ortho Pharmaceutical Corporation (offering a full range of contraceptive pills, diaphragms, intrauterine devices, spermicides, and vaginal antifungal agents, and dermatological products).

In addition, the consumer products companies, the professional products companies, and the industrial companies are consistent with the professionalism of this leading pharmaceutical house.

KNOLL PHARMACEUTICAL COMPANY

In breaking new ground for its building in Hanover Township in 1971, Knoll Pharmaceutical Company took an important step in a steady growth since the firm was founded in 1904. The new building provides the most efficient, up-to-date laboratory, manufacturing, and office facilities for Knoll's work force which numbers in excess of 200 persons.

Knoll has marketed Vicodin® Tablets, a schedule III analgesic combination of hydrocodone and acetaminophen and Dilaudid®, a schedule II analgesic.

In August 1981, Knoll introduced into the United States market Isoptin I.V. Isoptin was the first calcium channel-blocking agent made available for clinical use. It is indicated for the treatment of supraventricular tachyarrhythmias, including rapid conversion of paroxysmal supraventricular tachycardia to sinus rhythm and the temporary control of rapid ventricular rate in atrial flutter or atrial fibrillation. In March 1982, Isoptin Tablets were introduced for the treatment of all forms of angina pectoris. In angina of effort, Isoptin decreases myocardial oxygen demand and improves exercise tolerance. In angina at rest, Isoptin dilates the coronary arteries and prevents coronary vasospasm.

Current research at Knoll involves a number of new drugs in the cardiovascular and surgical areas.

LEDERLE LABORATORIES

Lederle Laboratories, a division of American Cyanamid Company, is located in Wayne. In 1906, Dr.

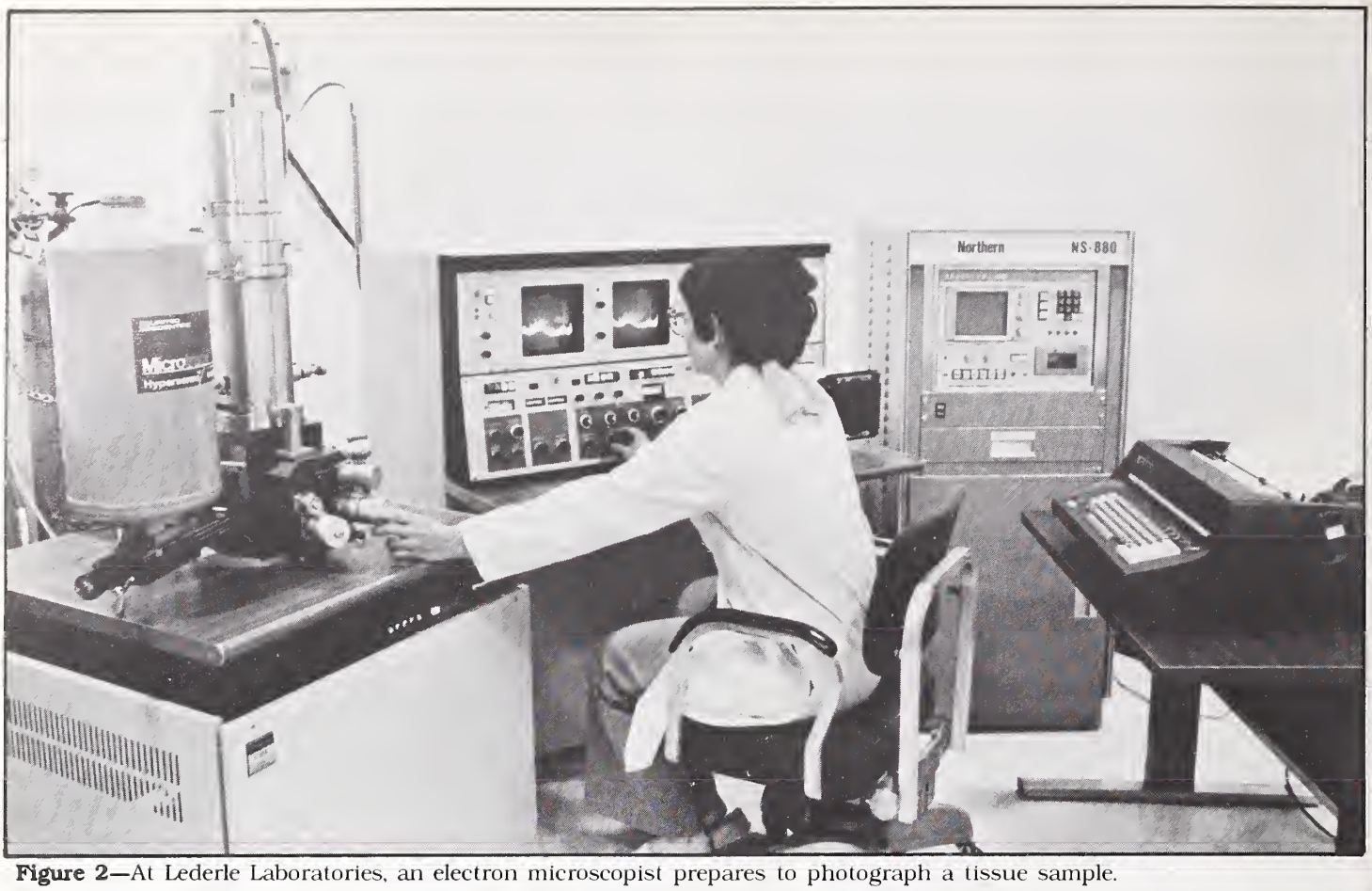


Figure 2—At Lederle Laboratories, an electron microscopist prepares to photograph a tissue sample.

Ernst J. Lederle founded Lederle Antitoxin Laboratories to produce urgently needed diphtheria antitoxin—and this was the beginning of a medical products company. In 1922, Lederle began a program of pharmaceutical development, the first results of which were epinephrine, pituitary extract, and desiccated thyroid tablets.

Lederle became the leading producer of type-specific sera for pneumonia; sera production ended when sulfonamides were developed. In 1930, Lederle Antitoxin Laboratories was purchased by American Cyanamid Company.

In 1982, Lederle introduced a new broad-spectrum semi-synthetic penicillin, Pipracil®, which is effective against an array of susceptible life-threatening bacterial infections. This antibiotic is indicated for treatment of infections of the urinary tract, pelvic and female genital organs, intra-abdominal contents, lower respiratory tract, skin and soft tissues, and bone and joints, which are caused by susceptible organisms.

Lederle's discovery programs (Figure 2) are aimed at the diseases that fill hospital beds: chronic diseases and mental illness. Current research priorities include: anticancer agents; new nondepressive anxiolytics; simplified medication for cardiovascular-renal disease to replace current complex and expensive treatment; control of atherosclerosis; fundamental solutions to major metabolic and inflammatory diseases; single-dose vaccines for encephalitis and sexually transmitted diseases; determining causes of rheumatoid arthritis; new antidiabetic and nonsteroidal antiasthmatic drugs; and treatment and prevention of senility.

MERCK & COMPANY, INC.

Merck & Company, Inc., in Rahway, a science-based enterprise with more than 30,000 employees, manufactures products in 28 countries and markets them in nearly 200 countries. The Merck Sharp & Dohme Research Laboratories Division is one of the world's leading biomedical research organizations and 1983 marked the 50th anniversary of the company which seeks to be at the forefront of science and innovation while maintaining its long tradition of product excellence and sense of public responsibility.

Merck products have proved effective in treating hypertension, congestive heart failure, arthritis, bacterial infections, pernicious anemia, mental depression, and symptoms of Parkinson's disease. Merck & Company also manufactures pharmaceutical agents which reduce the recurrence of heart attacks and the risk of death following heart attacks; prevent the blindness that can result from glaucoma; and protect people by vaccination against such diseases as measles, mumps, rubella, pneumococcal pneumonia, and hepatitis B. Presently, Merck scientists are involved in a study of herpes simplex, virus types 1 and 2, varicella, cytomegalovirus, hepatitis A, and a number of forms of cancer.

In the 1950s, Merck research revolutionized the control of hypertension with Diuril®, the first diuretic suitable for long-term use. A procession of valuable therapies has followed: Aldomet®, introduced in 1962 and widely accepted since, was used in more than two billion patient-days of treatment in 1982 alone; Moduretic®, which keeps the body from losing needed potassium during diuretic therapy; and Blocadren®, a beta-blocker drug which originally was introduced for control of hypertension, but which later became the first drug to demonstrate in a major study the ability to reduce, by 40 percent, the risk of death among people recovering from heart attacks.

ORGANON PHARMACEUTICALS

Organon Pharmaceuticals, in West Orange, is a division of Organon, Inc. Organon primarily manufactures injectable pharmaceuticals that are utilized in the hospital setting. Their primary product is Pavulon® (pancuronium bromide injection) which is the leading surgical muscle relaxant used by anesthesiologists throughout the United States. Pavulon® is a nondepolarizing neuromuscular blocking agent possessing all of the characteristic pharmacological actions of this class of drugs (curariform) on the myoneural junction.

A second product that is used widely is Hexadrol® (dexamethasone, USP). This drug is available in injectable and oral presentations. Hexadrol® is the leading brand of dexamethasone injectable products and is used in hospitals throughout the United States for a variety of indications, including: endocrine, rheumatic, hematologic, and neoplastic disorders; collagen, ophthalmic, gastrointestinal, respiratory, and dermatologic diseases; and allergic states.

Other important injectable products made by Organon Pharmaceuticals include: Deca-Durabolin®, Liquaemin®, Sodium®, Regonol®, Cortrophin® Gel, and methylprednisolone sodium succinate. Among oral products, the Cotazym® family of products is widely used in the care of cystic fibrosis patients. Another leading Organon product is Wigraine® used for the treatment of migraine headaches.

PHARMACIA, INC., U.S.A.

Pharmacia, Inc., U.S.A., whose United States operation is based in Piscataway, employs 350 persons and produces pharmaceuticals, diagnostics, and chemical separation products.

In the Pharmaceutical Division, there are three outstanding products: Azulfidine®, Healon®, and Debrisan®. Presently, the pharmaceutical area is working on clinical tests for Spherex® as an aid in the treatment of certain forms of cancer.

In the Diagnostic Division, Pharmacia, Inc. is the only company which markets an alternative to the traditional allergy tests. During 1982, Pharmacia introduced 15 allergy vaccines and a complete diagnosis, treatment, and monitoring package for allergy sufferers. This was expanded by the marketing of the Phadezym Analyzer and the Allergy Management System, an allergy-dedicated, computer-controlled instrument designed to simplify and improve the diagnostic reliability of nonradioimmunoassay (RIA) tests.

In the Separation Products Division, sales of products and systems for separation, purification, and cell cultivation have increased over the years. The most significant new product was chromato-focusing, an entirely new technique for more efficient separation of large quantities of substances.

REED & CARNRICK

Located in Piscataway, Reed & Carnrick is devoted to research and marketing in a number of fields: internal medicine, proctology, dermatology, and gynecology.

In 1982, the company expanded its Piscataway headquarters and announced an orientation toward new product development.

Major products of Reed & Carnrick include: Kwell®, for the eradication of lice and scabies; Proctofoam-HC®, (hydrocortisone acetate), an anti-inflammatory aerosol foam product for anorectal conditions; Phazyme®, a combination of simethicone and digestive enzymes for gastrointestinal distress; Cortifoam®, for the treatment of ulcerative proctitis; and Dilatrate®-SR (isosorbide dinitrate), a special delivery system for sustaining the release of an antianginal drug.

SANDOZ, INC.

Founded in 1886, Sandoz, Ltd. is the parent company of the East Hanover-based Sandoz, Inc. More than 1,400 employees are at the New Jersey corporate headquarters.

Sandimmune® (cyclosporine), a soil fungus derivative, is a potent suppressor of the immune system developed by Sandoz (Figure 3). Researchers believe the drug works by suppressing production of certain human lymphocytes. Investigators have suggested that Sandimmune® may be a valuable treatment against autoimmune disease, such as arthritis, myasthenia gravis, multiple sclerosis, and possibly some types of diabetes. Sandimmune® was approved by the Food and Drug Administration in November 1983 for kidney, liver, and heart transplants.

Current research efforts at Sandoz are centered on the development of compounds for the prevention and treatment of atherosclerosis, hypertension, diabetes, asthma, rheumatic conditions, postoperative venous thrombosis, and the complications of organ transplants.

Sandoz's Prescription Business Group has made significant contributions in many areas of medicine: headache relief, mental illness, obstetrics, geriatrics, and endocrine disorders.

SCHERING-PLOUGH

Schering-Plough, located in Kenilworth, a worldwide, research-based pharmaceutical enterprise, was formed in 1971 when two companies were brought together: Schering Corporation, U.S.A., an international, research-oriented manufacturer founded in 1929, and Plough, Inc., a major mass merchandiser of widely



Figure 3—Sandimmune® is an immunosuppressant drug that has proved its ability to curb the body's natural reaction to reject a transplanted organ, without compromising its infection-fighting defenses.

known consumer products beginning in 1908. In all, more than 25,000 employees in approximately 125 Schering-Plough companies around the globe serve in research, manufacturing, quality control, marketing, and administrative operations.

The Company's ethical pharmaceuticals, promoted only to the medical profession, include antibiotics, dermatologicals, and allergy, asthma, cough and cold products. Major antibiotic products include gentamicin (Garamycin®, Garamicina®), and netilmicin (Netromycin®, Metromycine®, Certomycin®). Dermatologicals include betamethasone dipropionate (Diprosone® and Diproderm®), betamethasone valerate (Valisone® and Celestoderm-V®), and tolnaftate (Tinactin® and Tinaderm®). The allergy and cough/cold line features Afrin®, Chlor-Trimeton®, and Drixoral®, Coricidin D®, and Trinalin®. Asthma products include Proventil® and Vanceril®.

Schering-Plough plays a role in the research and development of antibiotics, steroids, and antihistamines, as well as the expanding fields of immunology and recombinant DNA. The company has targeted four therapeutic areas for its research and development efforts: inflammatory and allergic disorders, and infectious and cardiovascular diseases. The several objectives of Schering-Plough are: to identify and produce those substances that are specific suppressors or inducers of the body's immune response system; to identify and produce those substances that will prevent the initiation of the allergic response in the body; and to identify and produce those substances that stimulate the production of antibodies serving as the body's main defense against infectious diseases.

SQUIBB CORPORATION

Squibb Corporation is a leading manufacturer of health care and personal care products and an innovator in cardiovascular and antibiotic research. From its international headquarters in Princeton, Squibb directs the research, production, and marketing activities of a range of pharmaceutical products: cardiovasculars, antibiotics, corticosteroids, hormones, radiopharmaceuticals, veterinary medicines, and items for personal health care. In all, Squibb offers nearly 1,000 products serving almost every specialty of medical care.

In 1981, Squibb discovered a new class of antibiotics with special properties, the monobactams. Now in FDA registration, aztreonam, the first synthetic compound, has shown remarkable activity against aerobic gram-negative organisms, which thrive in a hospital environment. First- and second-generation cephalosporins, once the mainstay against the resistant bacterial strains which have developed in hospitals (nosocomial), are losing their effectiveness in the "front lines" of the war against such bacteria.

In 1979, Squibb introduced Corgard® (nadolol), the first one-dose-a-day beta-adrenergic receptor bloeking agent for hypertension and angina pectoris.

In 1981, Squibb introduced Capoten® (captopril), the first angiotensin-converting enzyme inhibitor, a molecule which blocks the release of one of the body's most powerful vasoconstrictors—angiotensin II—a hormone that causes a rise in blood pressure. Capoten® has proved effective against both hypertension and the symptoms of congestive heart failure and was approved for treating heart failure patients in the United States on October 25, 1982.

Squibb Corporation employs over 20,000 people and maintains manufacturing plants, research laboratories, and distribution centers in 25 countries. In November 1982, Squibb became the first U.S. drug company to establish a joint venture with the People's Republic of China.

WARNER-LAMBERT/PARKE-DAVIS

Warner-Lambert of Morris Plains is a leading international producer and marketer of health care and consumer products. It operates in more than 130 countries, employs 42,000 people worldwide, and markets more than 1,000 products. Warner-Lambert is the ninth largest pharmaceutical firm in the world and sixth largest in the United States. The company is the seventh largest manufacturer of diagnostic equipment in the world and the largest supplier of empty gelatin capsules used in pharmaceutical production. It also has a leading position in the marketing of over-the-counter medication and gums and mints.

Most of the drug products are sold throughout the world under the Parke-Davis name. When Warner-Lambert acquired Parke-Davis in 1970, it added 116 years of pharmaceutical sophistication to its already considerable health care resources.

Some of Parke-Davis's best-known products include Dilantin®, a drug of choice for grand mal epilepsy; Benadryl®, first antihistamine to be marketed in the United States, and Chloromycetin®, the only broad-spectrum antibiotic that has lent itself to chemical synthesis on a practical scale. Among recent introductions are Meclomen®, an antiarthritic; Centrax®, a tranquilizer; Procan SR®, a cardiac medication for antiarrythmias, and Lopid®, a lipid or fat regulator for heart patients.

Through its diversity of prescription and over-the-counter pharmaceuticals, Parke-Davis has played a significant role in providing the world with low-cost health care products. Today, the Parke-Davis name is an endorsement of standard quality around the world, backing up its slogan—"Medicamenta vera—Truth in Medicine."

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Brody, H.S., M.D.
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Participatory Ethics Committees: A Model for Lay and Medical Collaboration

Joseph F. Fennelly, M.D., Madison*

Ethics committees rapidly are becoming a dominant vehicle for tempering the consequences of medical technology. We must have at once the vision, the courage, and the humility to so structure these bodies that they democratize and further humanize our unbalanced medical system.

Alexander Capron, the executive director of the President's Commission on Biomedical Ethics, frequently has emphasized that current dilemmas in medical care have arisen from the very successes of science and technology.

Our nation directs a larger percentage of its resources into the health system than any other country in the world. Society has relied so heavily on the health delivery system to solve life problems from neonatal intensive care units to divorce, alcoholism, trauma, aging, and hospice, the so-called "medicalization of society," and it now gravitates toward our medical institutions to resolve ethical and moral problems.

I believe that the structure of our current ethics committees leans heavily toward a predominance of professional and institutional representatives. Although the report of the President's Commission mentions public participation on ethics committees, the language of the report reinforces the primacy of experts. Repeated references to medical consultants, prognosis committees, interdisciplinary boards, ethicists, attorneys, social workers, and nurses reinforce institutional and medical dominance.[1]

In 1976, the New Jersey Supreme Court, while struggling with the sensitive issues in the Karen Ann Quinlan case, was looking for a practical and just method to assist the health professionals and families toward resolving the problems in this landmark case. The suggestion for an ethics committee was offered although there was little precedent or practical experience about the nature and function of these committees. To a great extent, the court "assumed" into existence these so-called ethics committees.[2,3]

Not only do we lack a dominant source for establishing a universal model for ethics committees, but we stagger from the weight of the mushrooming growth of information and technological advances influencing life and death decisions. The need to assimilate each new technology creates more distance between us. We develop our different lexicons and the larger picture eludes us.

Another factor creating conflict and reducing effective medical leadership is the ambivalence the patient experiences as he senses his fundamental dependence on the physician and the medical system.

While resisting medical authority, the public is unable to create effective alternate systems. Meanwhile other belief systems continue to grow including the right-to-life, euthanasia, and holistic health groups with emphasis on Eastern medicine and religion. These viewpoints add to the pluralism and further

*Dr. Fennelly is an internist. Correspondence may be addressed to Dr. Fennelly, 8 Shunpike Road, Madison, NJ 07940.

reduce our ability to evolve a reasonable and uniform set of values.

The media, particularly television, further reinforces the public's faith in science and the near miracle accomplishments of medicine. We are mesmerized as we observe the heart surgeon restarting the silent heart—the pulse of life continuing endlessly.

Fueled by our uncertainty, society turns to the citadel of healing (the health institution as the modern temple of Aesculapius), resting assured that somewhere in the inner sanctuary of this temple lies the universal truth—the answers to our ethical dilemmas. But, we cannot rest, for society's dominant belief system pursues the right of every individual to be involved in those decisions which affect the quality and direction of life. I believe that any system which fails to address this zeitgeist is doomed to mediocrity and failure.

This insistence on personal responsibility must be viewed within the context of the pluralism in our current ethical, religious, and cultural belief systems. Whether these belief systems grew out of our current distrust for all institutions or resulted in these doubts, is a moot point. Lessons learned through the involvement of citizens in decision-making roles in other institutions and groups addressing values, provide some guidelines for ethics committees. Our jury systems, boards of education, cultural foundations, and mutual self-help groups are some examples of participatory decision-making bodies.

What models exist and what steps need to be taken? What questions need to be asked in order that we can assist in structuring ethics committees which express a vital balance? The current growth of mutual self-help groups with institutional collaboration lends itself to a model for ethics committee organization.

The mutual self-help programs have had time-tested effectiveness in numerous areas. By expanding the community of caregivers to involve many nonmedical institutions such as YMCAs, churches, schools, and families, a central theme evolves where the doctor as healer and teacher adopts the stance of a facilitator. Health and education then become a partnership between the professionals and the consumer, the patient, the student, and the citizen. I hope the patient will become the senior partner in the quest for shared responsibility. A positive feedback system may be created whereby the professional is relieved of the burden of inordinate unidirectional responsibility.

Before we can assist in establishing more democratic models for ethics committees, the health professionals need to acknowledge their own doubts and uncertainties. Doctors, like others, need help in thinking through their own attitudes and deeply rooted feelings concerning the major questions of life and death and the appropriate use of medical resources. The length of training and its intensity of emphasis on science, while preparing us to make decisions about the use of technologies, little prepares us to handle the problems of the exaggerated expectations of the public. We are not sophisticated in comprehending that especial power and authority embodied in the concept of the "compleat" physician; i.e. the physician as healer, scientist, shaman, and technogod.

ETHICS COMMITTEE MODEL

No area provokes more concern than our own aging. The very number of the elderly lends itself to all sorts of statistics such as the fastest-growing age group in society today is in the over-85 category.

Three years ago the formation of a nursing home ethics committee was sparked by the repeated refusal of a severely impaired resident to maintain her feeding tube. Her former physician as well as her family documented her desires, which she had expressed over many years: in the event of a severe impairment due to a stroke, she would not wish to survive in a markedly impaired state.

While we were able to resolve this problem by maintaining an open discussion with the staff who were involved directly in the care of the resident, the gravity of the issue did not elude the larger community of the nursing home. We examined the needs of the resident and sought a balance between the needs of privacy and personal autonomy and the necessary paternalism of a health institution. Prior to its nursing home venture, the owners had vast experience in building and managing hotels and other residental dwellings. Hence, they built a design for living into the nursing home environment.

As medical director of the nursing home, I was aware of the recommendations of the New Jersey State Supreme Court.[2] We then initiated an ethics committee concept. The current Quinlan attorney, Paul Armstrong, with whom I had worked during that case, the head nurse, and the administrator sought to evolve a committee which emphasized the nursing/home polarization. We sought out former patients, patients' families, and community representatives such as a banker interested in the elderly. We invited lay and religious women ethicists, as we were aware of the different voice reflected in the women's point of view.[4] A recreation therapist trained for geriatrics, social workers, assistant hospital administrators, as well as the necessary mix of medical and religious representation, rounded out the committee.

The committee was entitled, "The Human Values Committee," in an effort to avoid undue anxiety or concerns about the term "ethics." The committee responded to its own needs. Its members moved toward the direction of consciousness raising, education, value clarification, support, and decision making. The committee created a pebble-in-the-pond effect. Attending physicians became more sensitive to what were appropriate medical interventions for their patients. They constantly were assured that the highest level of medical care would be sought out for their patients in the nursing home. Dialogue between residents, nurses, families, social workers, and other staff continued and a constant network maintained a feedback system so that the staff could better assess the wishes and desires of the resident and extended family.

The concept of "living wills" became a focal point for active resident, family, and legal guardian participation. As part of the initial nursing home interviews, the staff stressed the importance of establishing a historically well-documented theme about the patient's desires relative to appropriate medical interventions. Patients and families were encouraged to write or dic-

tate their attitudes and requests for the care to be given, within that context.

Area hospitals referred patients who presented intricate and complex ethical problems in the hope that we could be of help. These challenges expanded our insights and sensitivities. The ethics committee became aware of the cutting edge of decision making. The members were able to communicate the discomfort each felt as human beings dealing with the undealable as we shared the everyday issues of life and death. New suggestions were contributed from the members of the committee. The daughter of a former patient suggested we convene at a "round table." The practice of having alternate chairpersons led to a more democratic process.

This thumbnail sketch of a particular ethics committee attempts to reduce what I believe to be two deficiencies in existing committees: to move the people closer to the source of power[5] and how to mobilize the resources of mutual self-help groups to clarify values.

Methods which facilitate expanded expertise, based on a marriage of the experienced self-helper to the expert, require different styles. Leo Borman, in the official publication of the Rotary International, highlights some of the processes coming from this type of mutual self-help model.[6]

What can be learned from such a model? During the Quinlan case, from the time I wrote the original medical society statement for the Morris County Medical Society for the news media to its conclusion, I believed that one case leads to only one solution. In this context, our nursing home ethics committee is only one solution. Ethics committees should function at many levels. There are profound differences between a committee addressing values clarification and a "prognosis committee" which agrees that a patient is dead.

In the sense that this model is contributing to an ongoing experience, it is evident that our health institutions are becoming more sensitive to the desires and needs of the public. I believe that the professionals in religion, education, law, and medicine, supported by government, have a clear mandate to develop the skills for interfacing the general public with the health institutions in the area of biomedical ethics.

As a member of a steering committee seeking to develop such a citizen's group, I have been impressed with the enormous resources waiting to be harvested. Most of us, by instinct and/or by conditioning, have an intense need to share our life experiences and contribute any particularly significant experience to the pool of human knowledge.

In his last public address, the late Buckminster Fuller said that each of us carries the necessary knowledge for the survival of the human race.[7] Citizens, for example, who have had personal experiences in dealing with stillborns or impaired infants can sit on ethics committees and share their expertise.

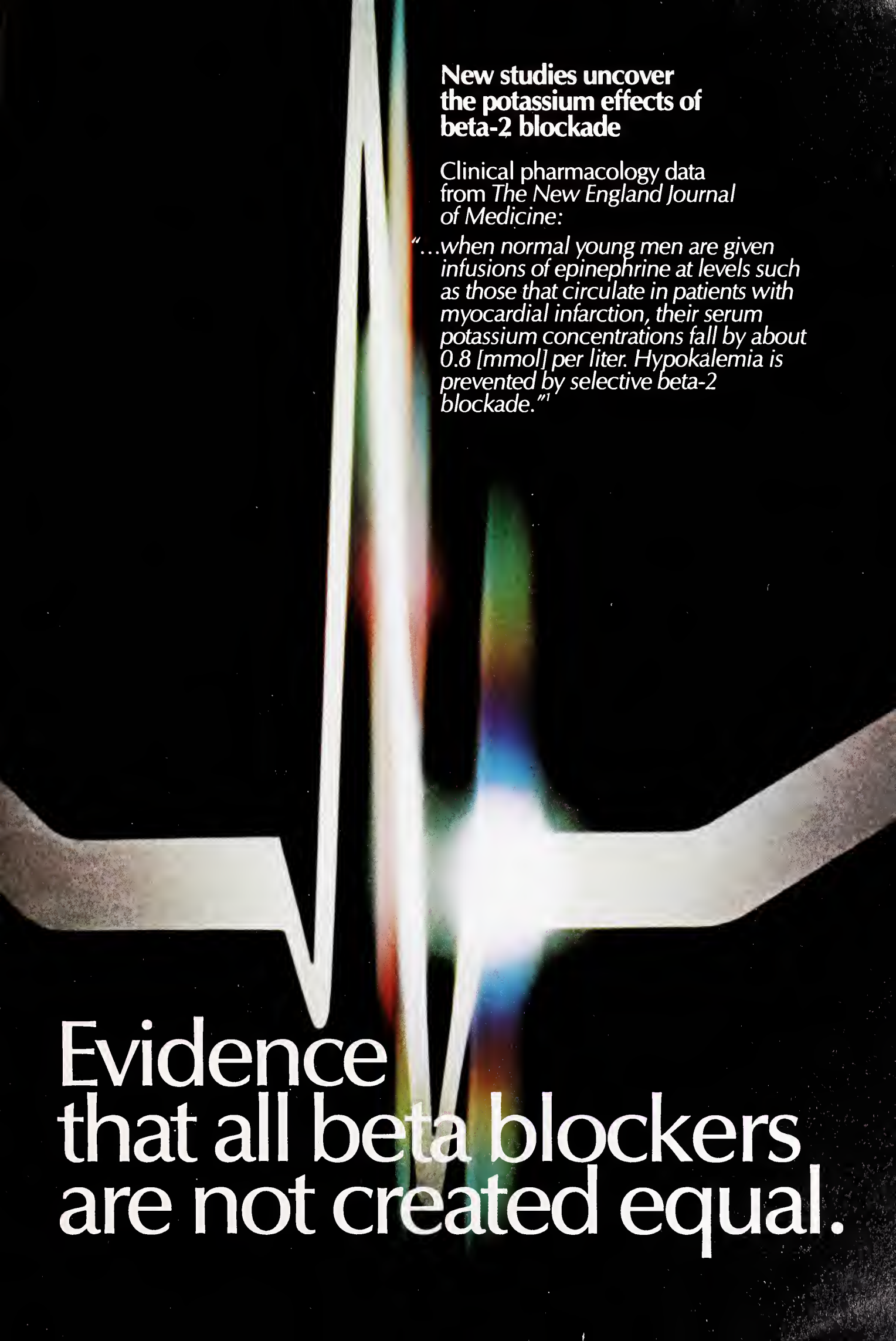
Vogeltree and Schwartz of the Stanford Research Institute raise the point that there no longer are any absolute models on which we can rely. They state, "We can no longer rely on those who play God."[7] In this context, society no longer should rely exclusively on any current medical models for decision making about human values.

All who share humanity are on a raft which rapidly is floating down a turbulent stream. We need to hold each other up so we can all stay on the raft. With that mutual support, we can make our dynamic consciousness into an emergent paradigm—in which our concerns produce creative processes which move out into ever-expanding circles of shared, but individual, responsibility.

Most of you desire to be leaders in the health care system, and this leadership must assure a broad base for appropriate public support. Ethics committees rapidly are becoming a dominant vehicle for tempering the consequences of medical technology. We must have the vision, the courage, and the humility to structure these bodies so that they democratize and further humanize our unbalanced medical system.

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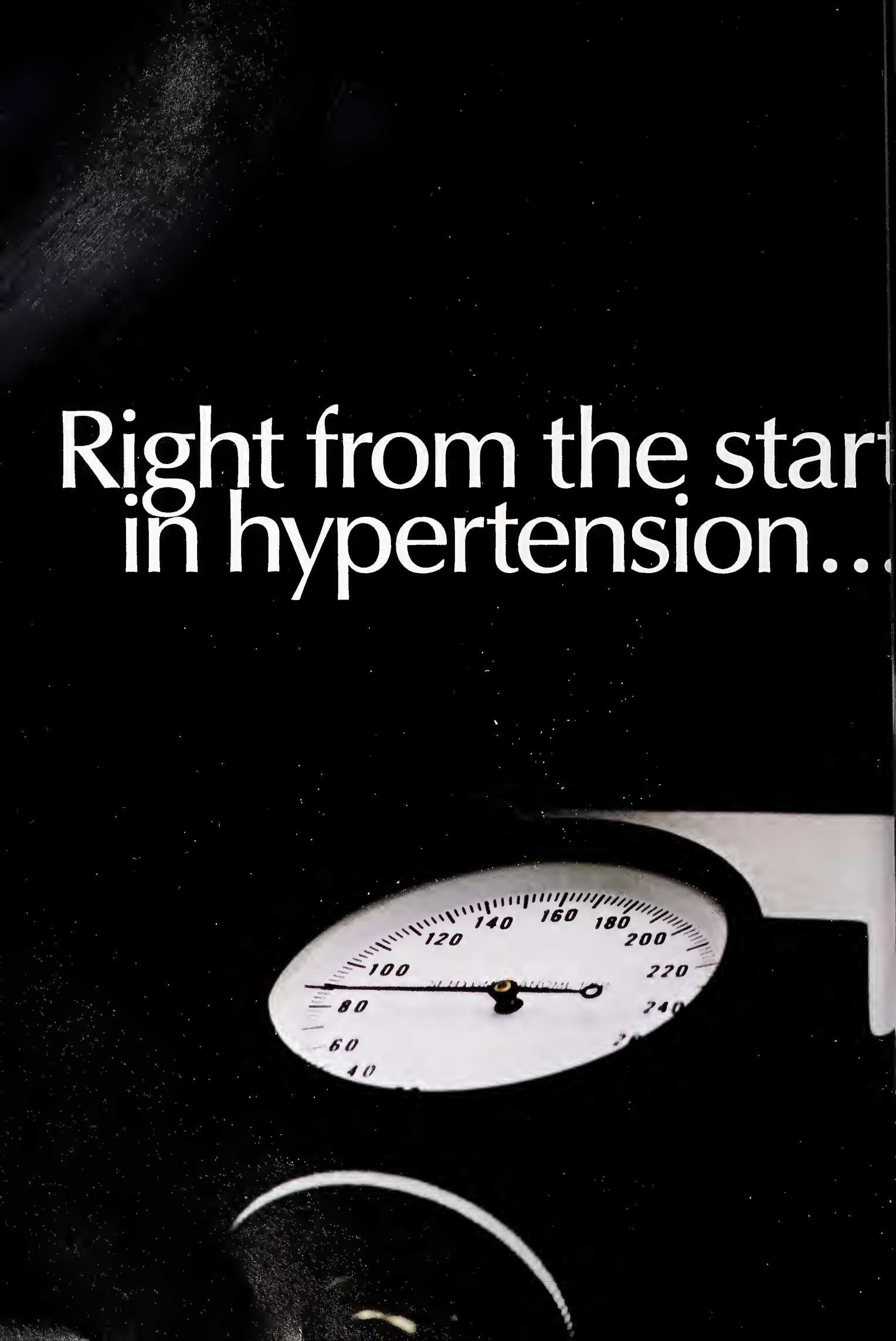
New studies uncover the potassium effects of beta-2 blockade

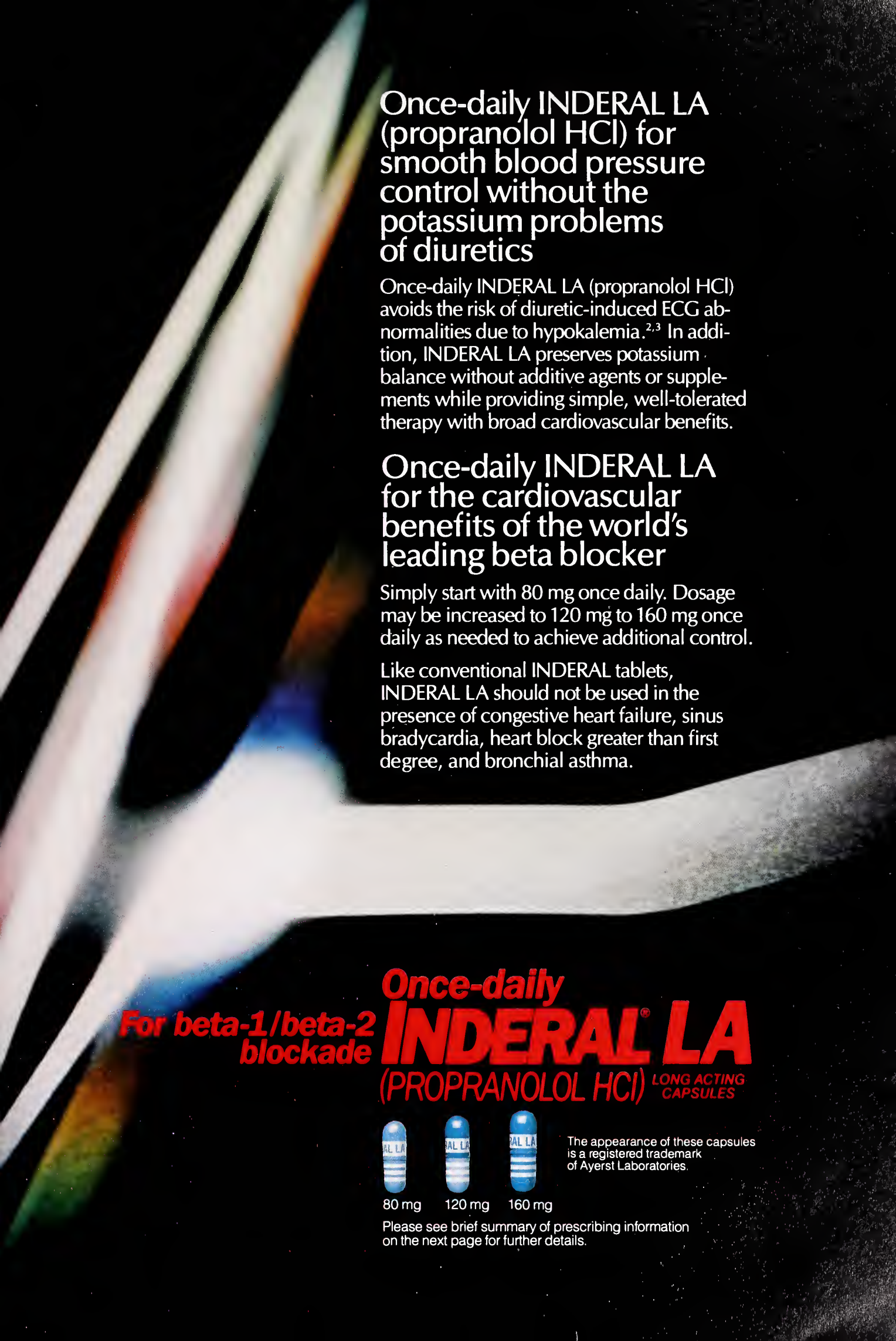
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In angina pectoris, propranolol generally reduces the oxygen requirement of the heart at any given level of effort by blocking the catecholamine-induced increases in the heart rate, systolic blood pressure, and the velocity and extent of myocardial contraction. Propranolol may increase oxygen requirements by increasing left ventricular fiber length, end diastolic pressure and systolic ejection period. The net physiologic effect of beta-adrenergic blockade is usually advantageous and is manifested during exercise by delayed onset of pain and increased work capacity.

In dosages greater than required for beta blockade, INDERAL also exerts a quinidine-like or anesthetic-like membrane action which affects the cardiac action potential. The significance of the membrane action in the treatment of arrhythmias is uncertain.

The mechanism of the antimigraine effect of propranolol has not been established. Beta-adrenergic receptors have been demonstrated in the pial vessels of the brain.

Beta receptor blockade can be useful in conditions in which, because of pathologic or functional changes, sympathetic activity is detrimental to the patient. But there are also situations in which sympathetic stimulation is vital. For example, in patients with severely damaged hearts, adequate ventricular function is maintained by virtue of sympathetic drive which should be preserved. In the presence of AV block, greater than first degree, beta blockade may prevent the necessary facilitating effect of sympathetic activity on conduction. Beta blockade results in bronchial constriction by interfering with adrenergic bronchodilator activity which should be preserved in patients subject to bronchospasm.

Propranolol is not significantly dialyzable.

INDICATIONS AND USAGE. Hypertension: INDERAL LA is indicated in the management of hypertension; it may be used alone or used in combination with other antihypertensive agents, particularly a thiazide diuretic. INDERAL LA is not indicated in the management of hypertensive emergencies.

Angina Pectoris Due to Coronary Atherosclerosis: INDERAL LA is indicated for the long-term management of patients with angina pectoris.

Migraine: INDERAL LA is indicated for the prophylaxis of common migraine headache. The efficacy of propranolol in the treatment of a migraine attack that has started has not been established and propranolol is not indicated for such use.

Hypertrophic Subaortic Stenosis: INDERAL LA is useful in the management of hypertrophic subaortic stenosis, especially for treatment of exertional or other stress-induced angina, palpitations, and syncope. INDERAL LA also improves exercise performance. The effectiveness of propranolol hydrochloride in this disease appears to be due to a reduction of the elevated outflow pressure gradient which is exacerbated by beta-receptor stimulation. Clinical improvement may be temporary.

CONTRAINDICATIONS. INDERAL is contraindicated in 1) cardiogenic shock; 2) sinus bradycardia and greater than first degree block; 3) bronchial asthma, 4) congestive heart failure (see WARNINGS) unless the failure is secondary to a tachyarrhythmia treatable with INDERAL.

WARNINGS. CARDIAC FAILURE: Sympathetic stimulation may be a vital component supporting circulatory function in patients with congestive heart failure, and its inhibition by beta blockade may precipitate more severe failure. Although beta blockers should be avoided in overt congestive heart failure, if necessary, they can be used with close follow-up in patients with a history of failure who are well compensated and are receiving digitalis and diuretics. Beta-adrenergic blocking agents do not abolish the inotropic action of digitalis on heart muscle.

IN PATIENTS WITHOUT A HISTORY OF HEART FAILURE, continued use of beta blockers can, in some cases, lead to cardiac failure. Therefore, at the first sign or symptom of heart failure, the patient should be digitalized and/or treated with diuretics, and the response observed closely, or INDERAL should be discontinued (gradually, if possible).

IN PATIENTS WITH ANGINA PECTORIS, there have been reports of exacerbation of angina and, in some cases, myocardial infarction, following abrupt discontinuance of INDERAL therapy. Therefore, when discontinuance of INDERAL is planned the dosage should be gradually reduced over at least a few weeks, and the patient should be cautioned against interruption or cessation of therapy without the physician's advice. If INDERAL therapy is interrupted and exacerbation of angina occurs, it usually is advisable to reinstitute INDERAL therapy and take other measures appropriate for the management of unstable angina pectoris. Since coronary artery disease may be unrecognized, it may be prudent to follow the above advice in patients considered at risk of having occult atherosclerotic heart disease who are given propranolol for other indications.

Nonallergic Bronchospasm (e.g., chronic bronchitis, emphysema)—PATIENTS WITH BRONCHOSPASTIC DISEASES SHOULD IN GENERAL NOT RECEIVE BETA BLOCKERS. INDERAL should be administered with caution since it may block bronchodilation produced by endogenous and exogenous catecholamine stimulation of beta receptors.

MAJOR SURGERY: The necessity or desirability of withdrawal of beta-blocking therapy prior to major surgery is controversial. It should be noted, however, that the impaired ability of the heart to respond to reflex adrenergic stimuli may augment the risks of general anesthesia and surgical procedures.

INDERAL (propranolol HCl), like other beta blockers, is a competitive inhibitor of beta receptor agonists and its effects can be reversed by administration of such agents, e.g., dobutamine or isoproterenol. However, such patients may be subject to protracted severe hypotension. Difficulty in starting and maintaining the heartbeat has also been reported with beta blockers.

DIABETES AND HYPOGLYCEMIA: Beta-adrenergic blockade may prevent the appearance of certain premonitory signs and symptoms (pulse rate and pressure changes) of acute hypoglycemia in labile insulin-dependent diabetes. In these patients, it may be more difficult to adjust the dosage of insulin.

THYROTOXICOSIS: Beta blockade may mask certain clinical signs of hyperthyroidism. Therefore, abrupt withdrawal of propranolol may be followed by an exacerbation of symptoms of hyperthyroidism, including thyroid storm. Propranolol does not distort thyroid function tests.

IN PATIENTS WITH WOLFF-PARKINSON-WHITE SYNDROME, several cases have been reported in which, after propranolol, the tachycardia was replaced by a severe bradycardia requiring a demand pacemaker. In one case this resulted after an initial dose of 5 mg propranolol.

PRECAUTIONS. *General:* Propranolol should be used with caution in patients with impaired hepatic or renal function. INDERAL (propranolol HCl) is not indicated for the treatment of hypertensive emergencies.

Beta adrenoreceptor blockade can cause reduction of intraocular pressure. Patients should be told that INDERAL may interfere with the glaucoma screening test. Withdrawal may lead to a return of increased intraocular pressure.

Clinical Laboratory Tests. Elevated blood urea levels in patients with severe heart disease, elevated serum transaminase, alkaline phosphatase, lactate dehydrogenase.

DRUG INTERACTIONS: Patients receiving catecholamine-depleting drugs such as reserpine should be closely observed if INDERAL is administered. The added catecholamine-blocking action may produce an excessive reduction of resting sympathetic nervous activity which may result in hypotension, marked bradycardia, vertigo, syncopal attacks, or orthostatic hypotension.

Carcinogenesis, Mutagenesis, Impairment of Fertility: Long-term studies in animals have been conducted to evaluate toxic effects and carcinogenic potential. In 18-month studies in both rats and mice, employing doses up to 150 mg/kg/day, there was no evidence of significant drug-induced toxicity. There were no drug-related tumorigenic effects at any of the dosage levels. Reproductive studies in animals did not show any impairment of fertility that was attributable to the drug.

Pregnancy: Pregnancy Category C. INDERAL has been shown to be embryotoxic in animal studies at doses about 10 times greater than the maximum recommended human dose.

There are no adequate and well-controlled studies in pregnant women. INDERAL should be used during pregnancy only if the potential benefit justifies the potential risk to the fetus.

Nursing Mothers: INDERAL is excreted in human milk. Caution should be exercised when INDERAL is administered to a nursing woman.

Pediatric Use. Safety and effectiveness in children have not been established.

ADVERSE REACTIONS. Most adverse effects have been mild and transient and have rarely required the withdrawal of therapy.

Cardiovascular: bradycardia; congestive heart failure, intensification of AV block; hypotension; paresthesia of hands; thrombocytopenic purpura; arterial insufficiency, usually of the Raynaud type.

Central Nervous System: lightheadedness; mental depression manifested by insomnia, lassitude, weakness, fatigue, reversible mental depression progressing to catatonia, visual disturbances, hallucinations; an acute reversible syndrome characterized by disorientation for time and place, short-term memory loss, emotional lability, slightly clouded sensorium, and decreased performance on neuropsychometrics.

Gastrointestinal: nausea, vomiting, epigastric distress, abdominal cramping, diarrhea, constipation, mesenteric arterial thrombosis, ischemic colitis.

Allergic: pharyngitis and agranulocytosis, erythematous rash, fever combined with aching and sore throat, laryngospasm and respiratory distress.

Respiratory: bronchospasm.

Hematologic: agranulocytosis, nonthrombocytopenic purpura, thrombocytopenic purpura.

Auto-Immune: In extremely rare instances, systemic lupus erythematosus has been reported.

Miscellaneous: alopecia, LE-like reactions, psoriasiform rashes, dry eyes, male impotence, and Peyronie's disease have been reported rarely. Oculomucocutaneous reactions involving the skin, serous membranes and conjunctivae reported for a beta blocker (practolol) have not been associated with propranolol.

DOSAGE AND ADMINISTRATION. INDERAL LA provides propranolol hydrochloride in a sustained-release capsule for administration once daily. If patients are switched from INDERAL tablets to INDERAL LA capsules, care should be taken to assure that the desired therapeutic effect is maintained. INDERAL LA should not be considered a simple mg for mg substitute for INDERAL. INDERAL LA has different kinetics and produces lower blood levels. Retitration may be necessary especially to maintain effectiveness at the end of the 24-hour dosing interval.

HYPERTENSION—*Dosage must be individualized.* The usual initial dosage is 80 mg INDERAL LA once daily, whether used alone or added to a diuretic. The dosage may be increased to 120 mg once daily or higher until adequate blood pressure control is achieved. The usual maintenance dosage is 120 to 160 mg once daily. In some instances a dosage of 640 mg may be required. The time needed for full hypertensive response to a given dosage is variable and may range from a few days to several weeks.

ANGINA PECTORIS—*Dosage must be individualized.* Starting with 80 mg INDERAL LA once daily, dosage should be gradually increased at three to seven day intervals until optimum response is obtained. Although individual patients may respond at any dosage level, the average optimum dosage appears to be 160 mg once daily. In angina pectoris, the value and safety of dosage exceeding 320 mg per day have not been established.

If treatment is to be discontinued, reduce dosage gradually over a period of a few weeks (see WARNINGS).

MIGRAINE—*Dosage must be individualized.* The initial oral dose is 80 mg INDERAL LA once daily. The usual effective dose range is 160-240 mg once daily. The dosage may be increased gradually to achieve optimum migraine prophylaxis. If a satisfactory response is not obtained within four to six weeks after reaching the maximum dose, INDERAL LA therapy should be discontinued. It may be advisable to withdraw the drug gradually over a period of several weeks.

HYPERTROPHIC SUBAORTIC STENOSIS—80-160 mg INDERAL LA once daily.

PEDIATRIC DOSAGE—At this time the data on the use of the drug in this age group are too limited to permit adequate directions for use.

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Case Report: Bronchiolitis Obliterans with Multinodular Lung Densities and Lymphoma

John Cholankeril, M.D., Juan A. Hernandez, M.D., Jesus Cenizal, M.D., Carlos Remolina, M.D., Elizabeth*

Our patient with diabetes and hypertension had nodules measuring 1 cm in both lungs. Biopsy showed bronchiolitis obliterans; these densities cleared without treatment. The patient developed malignant lymphoma and died. Whether the relationship of the bronchiolitis obliterans and the lymphoma was coincidental is uncertain.

Reynaud, in 1835, made the first reference to bronchiolitis obliterans.[1] In 1901, Lang described two fatal cases.[1] Since that time, there have been many descriptions in the literature, including cases secondary to toxic inhalations (war gas, sulphuric, hydrochloric, or nitric acid fumes, talcum powder, zinc stearate, and hot gases),[1-6] inhalation of foreign bodies,[7] and cases secondary to infections (measles, whooping cough, influenza, and adenovirus.[1,7,8]

CASE HISTORY

A 66-year-old black female, who had repeated hospital admissions for treatment of hypertension and diabetes mellitus, was found to have abnormal chest x-ray findings in August 1980. She denied cough, dyspnea at rest or on exertion, peripheral edema, and weight loss. No history of smoking or exposure to known carcinogens was elicited.

Past medical history was noncontributory, except for hypertension, diabetes mellitus, and peripheral vascular disease. There was no history of work environmental exposure.

Physical examination revealed a well-developed black female. Vital signs showed a BP of 140/80, pulse rate of 68/minute, and respiratory rate of 16/minute. The patient was in no acute distress. The physical examination was essentially negative except for peripheral vascular disease.

Laboratory examinations showed: CBC, SMA 12, and EKG were within normal limits. The ventilogram revealed a slightly restricted forced vital capacity with no ventilatory obstruction and findings consistent with pulmonary emphysema. After bronchodilation treatment, the forced vital capacity returned to normal. Chest x-rays showed multiple discrete small pulmonary nodules about 1 cm in diameter distributed throughout both lung fields (Figure 1). Gallium scan of the chest was negative. Metastatic disease was considered; however, thorough evaluation failed to reveal any evidence of primary malignancy.

A left thoracotomy revealed multiple nodules, and one was biopsied. The surgical specimen consisted of a wedge of somewhat undercrepitant lung parenchyma measuring approximately 4.5 x 3 x 2 cm. Some nodularity was palpated. The cut surface showed to better advantage a few ill-defined nodules, the largest measuring about 1.5 cm in diameter. Grossly, no overt

*Dr. Cholankeril is Director, Department of Radiology, Jersey City Medical Center; Dr. Cenizal is from the Department of Radiology, Dr. Hernandez is from the Department of Pathology, and Dr. Remolina is from the Department of Medicine, St. Elizabeth Hospital, Elizabeth. Correspondence may be addressed to Dr. Cholankeril, Director, Department of Radiology, Jersey City Medical Center, 50 Baldwin Ave., Jersey City, NJ 07304.

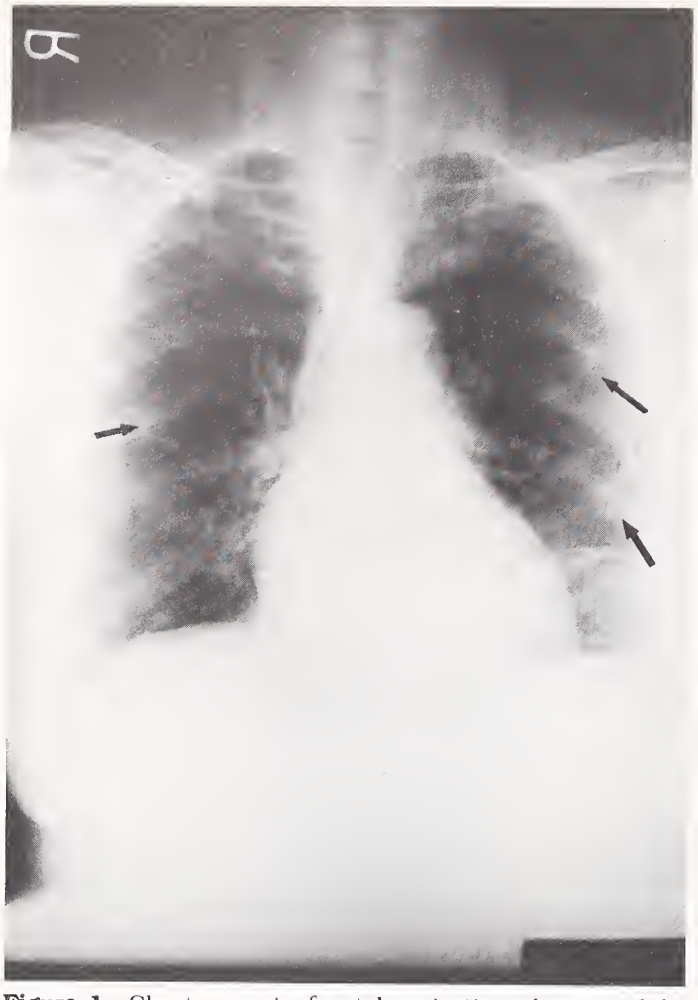


Figure 1—Chest x-ray in frontal projection shows nodular densities in both lungs measuring about 1 cm in diameter (arrows).

necrosis was apparent in these nodules. Microscopically, the nodules revealed obstructed bronchioles with surrounding areas of chronic pneumonitis (Figure 2A). Most respiratory bronchioles were more or less filled with masses of organizing granulation tissue obliterating the lumen completely; other areas showed a slit-like lumen. Some of the intraluminal organized polypoid masses were lined by altered respiratory epithelium (Figure 2B). All involved bronchioles were surrounded by marked interstitial infiltration with lymphocytes and plasma cells. A neoplastic process, i.e. malignant lymphoma, was not demonstrated in this material.

Symptomatic treatment was given. Followup x-rays showed resolution of the nodules. Eight months later, in April 1981, the patient was rehospitalized for swelling of the left axillary lymph nodes with minimal swelling of the left upper extremity of one week duration. There was no history of trauma or infection. Physical examination at this time revealed multiple enlarged lymph nodes, ranging in size from 2 to 4 cm, in the left axilla. In addition, smaller nodules were noted in the left inguinal region. Laboratory studies and chest x-rays were normal. CT scan of the abdomen showed enlarged retroperitoneal lymph nodes.

A left axillary dissection was performed and a number of enlarged firm lymph nodes (up to 3.9 cm in diameter) were removed from the fat pad. Their cut surfaces showed obliteration of the usual gross features by "fish flesh-like tissues" with apparent involvement of perinodal fat by a similar process. Micro-

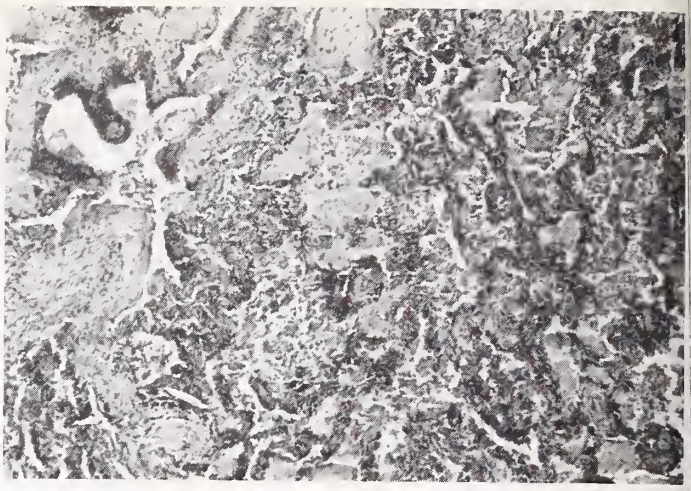


Figure 2A—Bronchiolitis obliterans (low power). The bronchiolar lumens are filled with fibroblastic granulation tissue masses. There is marked chronic pneumonitis in the background.

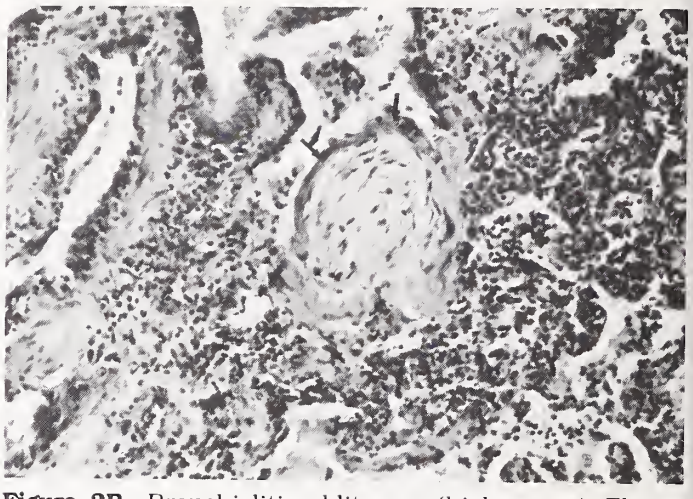


Figure 2B—Bronchiolitis obliterans (high power). The intraluminal polypoid organized granulation tissue mass is covered with a layer of flattened epithelial cells (arrows).

scopically, nodal architecture was diffusely effaced by a rather monotonous population of neoplastic lymphocytic cells. A low-power photomicrograph (Figure 3A) demonstrates extension of the malignant process through the lymph node's capsule into the surrounding fat. Higher power photomicrograph more clearly visualizes the cytomorphological features of this diffuse intermediately differentiated lymphocytic lymphoma (Figure 3B). Remnants of the capsule also are appreciated here.

The patient was treated with vincristine, cytoxan, adriamycin, and prednisone, which gave significant reduction of the lymphadenopathies. She was discharged on medication for followup. After six months, she was readmitted with gradually increasing weakness of the legs. Studies confirmed hyperparathyroidism secondary to a parathyroid adenoma. She then developed low grade fever; blood cultures grew a few colonies of coagulase-positive *Staphylococcus aureus*. Her clinical condition deteriorated and she expired.

DISCUSSION

The most common clinical findings of bronchiolitis obliterans are cough, dyspnea, and sputum production.[1] The usual radiographic features are: miliary lesions, a pattern suggesting pulmonary edema, unilat-



Figure 3A—Malignant lymphoma (low power). The nodal architecture is effaced by a montonous infiltrate of lymphocytic cells which extends through the capsule (arrow) to the perinodal fat.

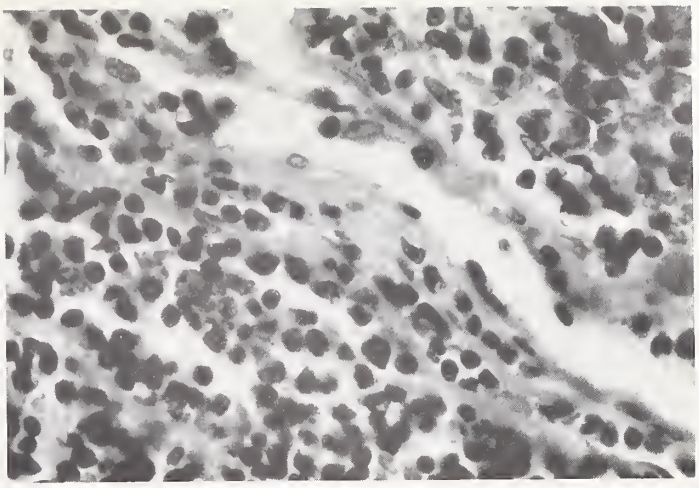


Figure 3B—Malignant lymphoma (high power). A diffuse infiltrate of intermediately differentiated lymphocytes. The infiltration of the capsule with spilling into the perinodal tissues is seen.

eral or bilateral hyperinflation, linear densities, atelectasis, granular and reticular infiltrates, diffuse nodular infiltrates, and patchy bronchopneumonia or lobar pneumonia.[1] Our patient with bronchiolitis obliterans later died of lymphoma.

The discrete, bilateral pulmonary nodules suggested several diagnostic possibilities including sarcoidosis, diffuse or localized vasculitis, multiple abscesses due to necrotizing pneumonia, or neoplasm (metastatic or bronchioalveolar cell type). Our patient's clinical condition of bronchiolitis obliterans with the radiological picture of multinodular densities is rare. Gosink et al. reported 58 patients with bronchiolitis obliterans.[1] Some of their x-rays showed a nodular pattern. Most of those nodules were 2 to 3 mm in size (micronodular or lineonodular pattern) but some discrete nodules measured just under 1 cm. Those authors concluded the micronodular shadows represented focal interstitial infiltration and intra-alveolar accumulation of exudate while the more discrete nodules represent the same infiltration in the entire acinus.[1] The lineonodular pattern also showed interstitial pneumonia or fibrosis.[1]

The present concensus among pulmonary morphologists is that the above histologic changes, currently referred to as bronchiolitis obliterans, are a common end stage for a number of respiratory insults. The etiology of bronchiolitis obliterans may be grouped into four major categories: chronic or recurrent respiratory disease, postpneumonic, toxic inhalation, and unknown.

All of Gosink's patients did better with a combination of antibiotics and steroids than with either one alone. Some patients recovered totally, some partially, and some died. The effects were more severe in patients with discrete nodular densities on chest x-ray. Two of their nine patients in that category recovered completely, one became chronically ill, and five died. Ten of their patients had other severe coexisting diseases: malignant lymphoma, leukemia, uremia, and collagen diseases (idiopathic thrombocytopenic purpura, rheumatoid arthritis, or scleroderma).[1]

SUMMARY

Our patient had asymptomatic discrete nodules in both lungs which measured about 1 cm in diameter as seen on chest films. Thoracotomy and pulmonary biopsy showed bronchiolitis obliterans. These densities disappeared without treatment. After eight months, she developed malignant lymphoma and died. Two cases of Gosink et al. also had lymphoma. Whether this was a coincidental occurrence in our patient or whether bronchiolitis obliterans actually has a relationship with malignant lymphoma is not clear at this time. This finding needs further evaluation.

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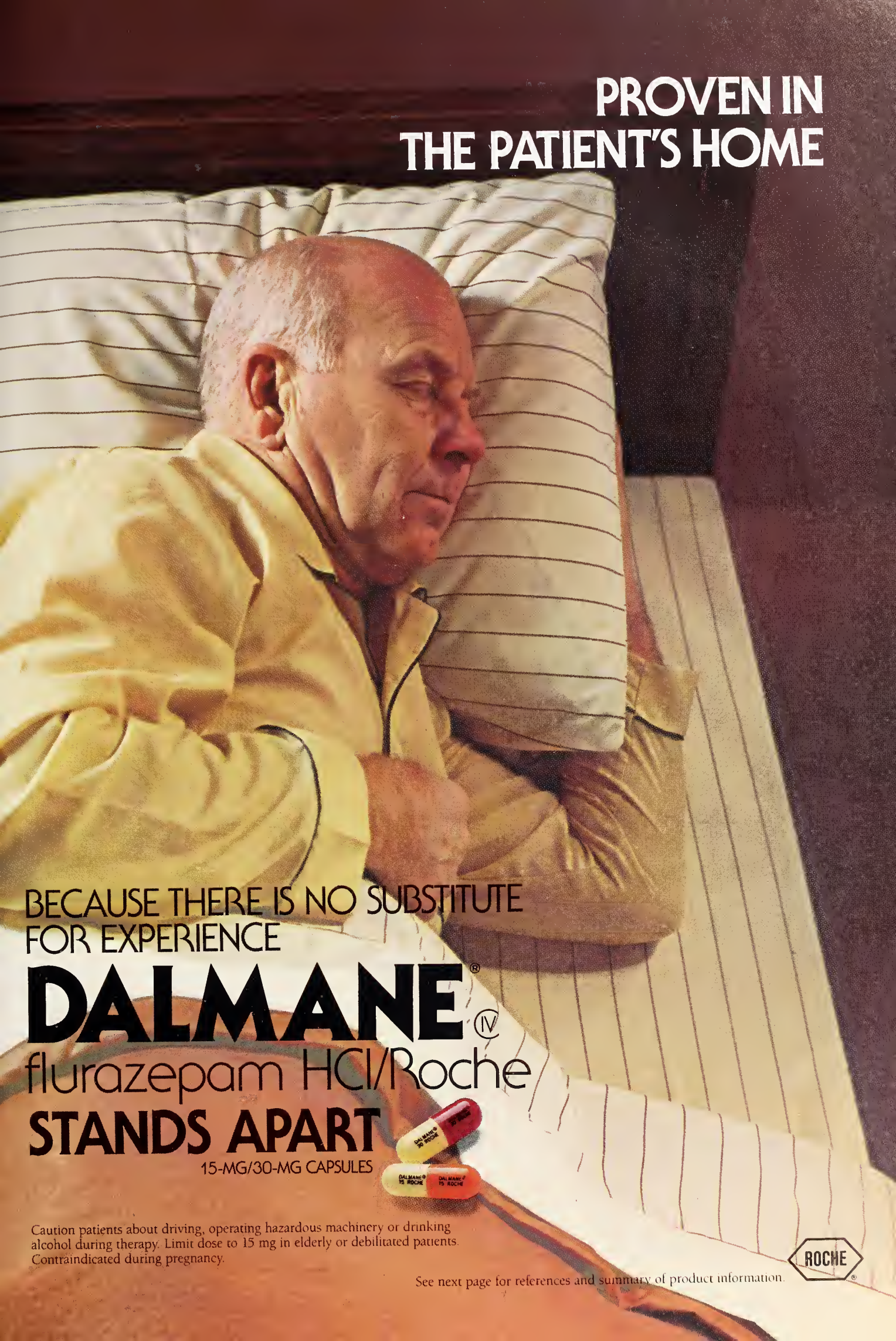


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Warnings: Caution patients about possible combined effects with alcohol and other CNS depressants. An additive effect may occur if alcohol is consumed the day following use for nighttime sedation. This potential may exist for several days following discontinuation. Caution against hazardous occupations requiring complete mental alertness (*e.g.*, operating machinery, driving). Potential impairment of performance of such activities may occur the day following ingestion. Not recommended for use in persons under 15 years of age. Though physical and psychological dependence have not been reported on recommended doses, abrupt discontinuation should be avoided with gradual tapering of dosage for those patients on medication for a prolonged period of time. Use caution in administering to addiction-prone individuals or those who might increase dosage.

Precautions: In elderly and debilitated patients, it is recommended that the dosage be limited to 15 mg to reduce risk of oversedation, dizziness, confusion and/or ataxia. Consider potential additive effects with other hypnotics or CNS depressants. Employ usual precautions in severely depressed patients, or in those with latent depression or suicidal tendencies, or in those with impaired renal or hepatic function.

Adverse Reactions: Dizziness, drowsiness, lightheadedness, staggering, ataxia and falling have occurred, particularly in elderly or debilitated patients. Severe sedation, lethargy, disorientation and coma, probably indicative of drug intolerance or overdosage, have been reported. Also reported: headache, heartburn, upset stomach, nausea, vomiting, diarrhea, constipation, GI pain, nervousness, talkativeness, apprehension, irritability, weakness, palpitations, chest pains, body and joint pains and GU complaints. There have also been rare occurrences of leukopenia, granulocytopenia, sweating, flushes, difficulty in focusing, blurred vision, burning eyes, faintness, hypotension, shortness of breath, pruritus, skin rash, dry mouth, bitter taste, excessive salivation, anorexia, euphoria, depression, slurred speech, confusion, restlessness, hallucinations, and elevated SGOT, SGPT, total and direct bilirubins, and alkaline phosphatase; and paradoxical reactions, *e.g.*, excitement, stimulation and hyperactivity.

Dosage: Individualize for maximum beneficial effect. *Adults:* 30 mg usual dosage; 15 mg may suffice in some patients. *Elderly or debilitated patients:* 15 mg recommended initially until response is determined.

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Case Report: Intraosseous Gouty Tophus

Ramesh C. Mahapatro, M.D., Lawrence C. Sylvia, M.D., Stanley M. Becker, M.D., Toms River*

A gouty tophus was found in the shaft of right clavicle at the junction of middle and outer third; it was distant from the joint which revealed no radiologic evidence of gouty arthropathy. There were no soft tissue tophi adjacent to the bone. This finding is extremely rare.

Intraosseous deposits of urate crystals in tophaceous gout usually are at the metaphyseal ends of tubular bones within their periosteal covering and in the subchondral spongy bone.[1] With the growth and expansion of the tophus in the bone, the shaft may be invaded by direct extension from the metaphysis.[2] Less frequently, soft tissue tophi may cause pressure defects in the underlying bone and multiple pressure defects may cause considerable erosion of bone.[3] We encountered a patient with an unusual intraosseous gouty tophus at the junction of the middle and outer third of the shaft of right clavicle. The tophus was distant from the joint, which showed no radiologic evidence of gouty arthropathy; there were no soft tissue tophi adjacent to the bone. To our knowledge, there is no report of a similar case in the literature.

CASE REPORT

A 72-year-old woman was hospitalized for evaluation of tophaceous gout. She had a 10-year history of gout and her arthritic complaints were confined mainly to the large joints: both elbows and the left shoulder. However, the proximal interphalangeal joints also were involved, especially during acute attacks. She had been maintained on Zyloprim® 300 mg/day and Colchicine® 0.6 mg/day. She had a family history of gout and had been drinking three to four ounces of alcohol daily for the last 20 years. The past medical history included a hysterectomy 5 years ago and a right mastectomy for carcinoma of the breast 6 years ago. The axillary lymph nodes removed at the time of operation did not show any evidence of metastasis and she received no adjuvant chemotherapy or radiotherapy following the surgery.

Multiple subcutaneous tophi were present in the lateral aspects of both elbows and on the dorsum of right foot. A serum uric acid level was 6 mg/dl (normal female: 2.5 to 5.5 mg/dl). Roentgenographic survey of the skeleton revealed an area of radiolucency with no surrounding sclerosis at the junction of middle and distal third of the right clavicle (Figure 1).

Total body scintogram was done following the injection of 15 millicuries of Tc/99m pyrophosphate and no significant abnormality was noted. Bone marrow aspiration revealed no evidence of metastatic tumor.

Since there was a possibility of metastatic carcinoma in the differential diagnosis of the lytic lesion in the clavicle, the patient underwent an excisional biopsy of the right clavicle and the adjacent soft tissue. At surgery, a thickened periosteum was found and a definite, easily opened, punched out, 1 cm

*Dr. Mahapatro is a Pathologist, Community Memorial Hospital, Toms River; Dr. Sylvia is Director of Laboratories, Monmouth Medical Center, Long Branch; and Dr. Becker is Director of Laboratories, Freehold Area Hospital, Freehold. Correspondence may be addressed to Dr. Mahapatro, Community Memorial Hospital, Highway 37 West, Toms River, NJ 08753.



Figure 1—Roentgenogram showing radiolucent area without surrounding sclerosis at the junction of middle and distal third of right clavicle.

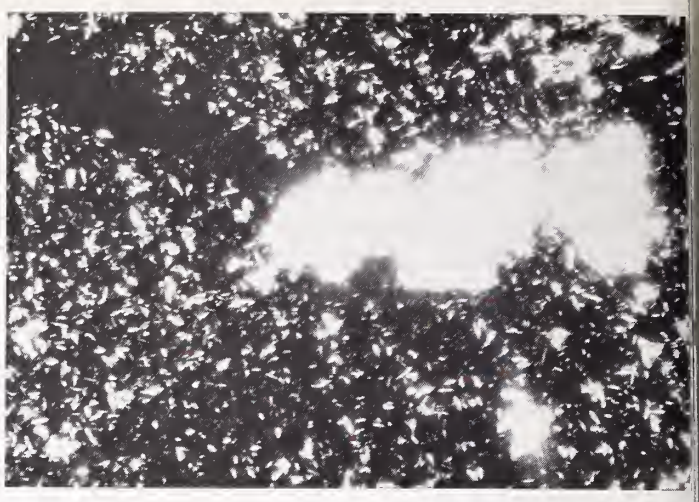


Figure 2—Wet preparation of tophus material in alcohol seen under polarized light showing uric acid crystals (x125).

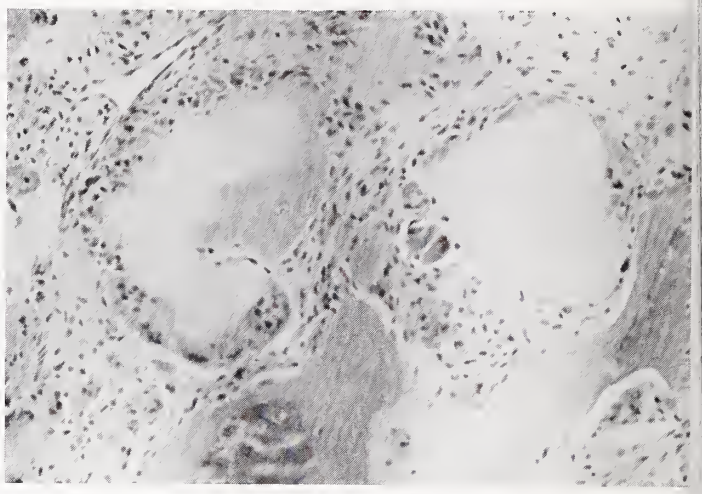


Figure 3—Deposits of amorphous material surrounded by foreign body giant cells and mononuclear cells seen between bony trabeculae (hematoxylin-eosin, x125).

lesion in the clavicle was curetted. The curettings were white, granular material which were not calcific but probably tophaceous; they were fixed in alcohol and a part of it was examined under a compensated polarized light microscope. Yellow, negatively birefringent, needle-shaped crystals characteristic of sodium urate were observed (Figure 2). The rest of the curetted material was fixed in 10 percent formalin, processed for histopathological examination and hematoxylin-eosin stained slides were examined. The microscopic examination revealed deposits of amorphous material surrounded by foreign body type giant cells and mononuclear cells between the bony trabeculae (Figure 3). The periosteum and the soft tissue around the lesion were removed and examined. The histology of these tissues was essentially normal with no evidence of gouty tophus deposit.

COMMENTS

Our case is instructive because the occurrence of a tophus in this location obviously is rare. Intensive search of the literature failed to reveal a similar report. The reports of intraosseous tophi describe lesions in the metaphysis and the subchondral bone. In these instances, the crystals were first deposited in the Haversian system, slowly enlarging a cavity packed with urate crystals.[4] This kind of deposition is conceivable considering the fact that there is great affinity of cartilage tissue for urates,[5] and that the metaphysis and the subchondral bone have the advantage of close proximity to cartilage. However, in our patient, the deposition of urates was distant from cartilage. Unfortunately, the role of local factors in the production of tophaceous gout is understood poorly, although it has been observed that monosodium urate deposits only in the connective tissues of the body.[6] Crystals are found in cartilage, tendon sheaths, synovial fluid, and subcutaneous tissues of the skin, but they are not observed in the parenchymal organs. A few isolated reports reveal tophi in the heart but only in the connective tissue portion, i.e. the valves and the conduction system.[7] Many factors may govern the deposition of gout in the intraosseous location, but they are not understood well. However, it is important to realize that gouty tophus may occur in the intraosseous location. A patient with a history of gout and a bone lesion described as a "hole in the bone" should have the lesion biopsied and examined for urate deposits.

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Case Report: Cardiorespiratory Failure Due to Recurrent Pectus Excavatum Deformity

Roger A. Moore, M.D., Kathleen McNicholas, M.D.,
David M.F. Murphy, M.D., Michael Strong, M.D., Browns Mills*

Right heart failure improved following surgical intervention in a patient with severe restrictive lung disease. Long-term post-operative ventilatory support should be anticipated for such patients. Immediate repair of recurrent pectus excavatum deformity is advised to prevent alveolar hypoplasia.

Severe pectus excavatum deformities produce a restrictive respiratory pattern and can lead to the development of secondary pulmonary hypertension and right heart failure.[1] Early surgical repair of these defects reverses cardiorespiratory compromise.[2-5] The role of surgery in the management of patients with recurrent pectus deformities who have entered end-stage cardiorespiratory failure is less clear. This group may be similar to other patients with severe restrictive thoracic deformities and have no initial improvement in their cardiorespiratory state following surgical repair.[6-8] A patient in end-stage cardiorespiratory failure secondary to a recurrent pectus excavatum deformity is presented.

CASE REPORT

A 22-year-old, 50 kg, 179 cm, white male had a history of unsuccessful pectus excavatum repair at 2½ years of age. A month-long postoperative course had been complicated by sepsis, coma, respiratory insufficiency, and recurrence of the deformity. Over the ensuing years, due to his progressive thoracic deformity, he experienced slowly increasing restriction of his daily activity. Respiratory distress had accelerated over the three months prior to admission to the point where he had to "think to take each breath." The patient gave no history of a recent upper respiratory infection and his only medication was theophylline 200 mg three times a day. On physical examination, the dyspneic, somnolent, asthenic patient was leaning forward and using all accessory muscles of respiration. His respiratory rate was 40 per minute, which he maintained with a constant rocking motion of his body. There was marked chest wall deformity (Figure 1) with a diffuse pectus excavatum and mild kyphoscoliosis. Breath sounds were absent in the bases. The heart rate was regular at 110 beats/minute with a widely split second heart sound. The blood pressure was 94/80 torr on inspiration and 108/90 torr on expiration. He was mildly cyanotic and had ankle edema. Abnormal laboratory studies included: arterial blood gas (ABG) study on 0.5 L of nasal oxygen—pH 7.30, $PaCO_2$ 61 torr, PaO_2 43 torr, O_2 saturation 75 percent, base excess 5.6; EKG—right ventricular hypertrophy with P-pulmonalae; chest roentgenogram—reversal of normal thoracic spinal curve, increased pulmonary vasculature, pleural thickening in the bases, and a severe pectus deformity (Figure 2A); lung scan—severely decreased lung volumes with adequate per-

*From Deborah Heart and Lung Center, where Dr. Moore is Cochairman, Department of Anesthesiology, Dr. McNicholas is Director of Pediatric Thoracic and Cardiovascular Surgery, Dr. Murphy is Chairman, Pulmonary Department, and Dr. Strong is Associate Chairman, Department of Thoracic and Cardiovascular Surgery. Correspondence may be addressed to Dr. Moore, Deborah Heart and Lung Center, Browns Mills, NJ 08015.



Figure 1—Patient on first admission showing severe chest deformity.

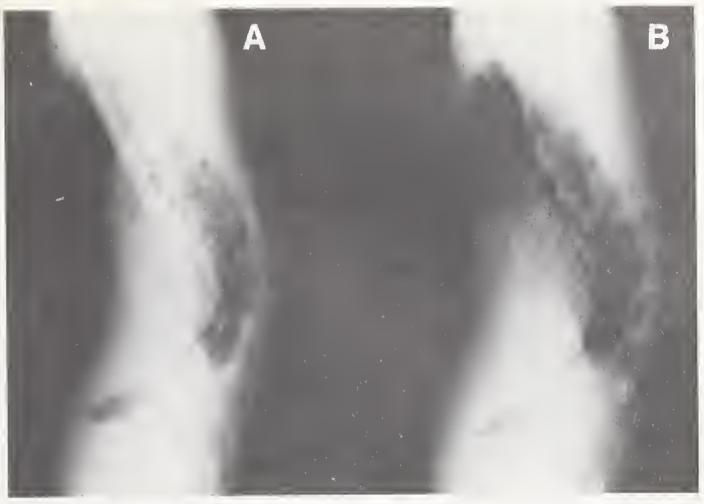


Figure 2—Lateral chest roentgenogram taken: prior to surgery (A) and following surgery (B). Note the presence of mild kyphosis.

fusion of the lower lung fields but decreased perfusion of the right middle lobe and lingula; pulmonary function tests—markedly decreased lung volumes (Table).

Two days following admission, the patient was taken to the operating room without premedication. Intravenous, radial arterial and internal jugular thermodilution Swan-Ganz catheters were placed. The Swan-Ganz could not be manipulated into the pulmonary artery due to cardiac distortion and pressures noted were right ventricular 76/9 torr, right atrial 16 torr, and systemic 158/79 torr. Anesthesia was induced with fentanyl 25 μg/kg and pancuronium 0.1 μg/kg, and the trachea was intubated with an 8.0 internal diameter endotracheal tube. The peak inspiratory pressure with a tidal volume of 650 ml was 45 cm H_2O.

Extensive chest wall reconstruction was performed. Costal cartilages and adjacent portions of abnormal ribs were resected. The sternum was freed from its diaphragmatic attachments and mobilized. Transverse sternal osteotomy was performed and a posterior cartilageous wedge inserted. The intercostal muscle bundles were transected and not reapproximated. Both pleural cavities were entered and drained. Immediately following surgery, the Swan-Ganz catheter was advanced into the pulmonary artery and a pulmonary arterial pressure of 35/16 torr, a pulmonary wedge pressure of 12 torr, and a right atrial pressure of 6 torr were obtained. The peak inspiratory pressure had fallen to 30 cm H_2O with a 650 ml tidal volume. The initial postoperative course was uncomplicated. While weaning from ventilatory support, CO_2 retention occurred, especially during sleep. The patient was extubated on the third postoperative day but subsequently deteriorated. On an FIO_2 of 33 percent, an ABG showed a pH 7.11, $PaCO_2$ 118 torr, PaO_2 50 torr, O_2 saturation 97 percent, base excess 3.9. He was reintubated and underwent a tracheostomy with a No. 8 Shiley tube on the fourth postoperative day. He was slowly weaned from the ventilator and decannulated three weeks following surgery. Pulmonary assessment at this time included the following: room air ABG—pH 7.39, $PaCO_2$ 50 torr, PaO_2 65 torr, O_2 saturation 93, base excess 4.0; lung scan—slightly improved ventilation perfusion ratio, especially in the right middle lobe; pulmonary function tests—slight increase in lung volumes (Table); and chest roentgenogram—improved intrathoracic volume (Figure 2B).

The patient was readmitted six weeks later with a history of increasing confusion, somnolence, and respiratory distress. ABG on 1.0 liter O_2 by nasal cannula was pH 7.23, $PaCO_2$ 145 torr, PaO_2 38 torr, O_2 saturation 56.4 percent, base excess 26. Despite the severe hypercapnea and hypoxemia, he remained awake and oriented, although "exhausted from breathing." Bronchodilators and hourly IPPB treatments were administered. A tracheostomy was performed and a No. 4 Shiley tube inserted. Intensive nutritional support was provided by a combination of oral and nasogastric feeding. Multiple attempts at weaning the patient from respiratory support were made including the use of a cuirasse respirator. During the day, the patient was able to maintain $PaCO_2$ in the range of 70 to 80 torr, but at night the $PaCO_2$ consistently rose over 100 torr. This was managed by use of intermittent mandatory ventilation during sleep with a portable ventilator. The patient was discharged two weeks following the second admission with a tracheostomy in place.

He has returned to full-time employment and has noted a marked improvement in his exercise tolerance while continuing to use a portable ventilator during sleep. Repeat pulmonary function tests seven months following surgery showed further improvement in lung volumes (Table) with a room air ABG pH 7.38, $PaCO_2$ 50 torr, PaO_2 64 torr, O_2 saturation 91.9 percent, base excess 4.3.

DISCUSSION

The management of cardiorespiratory failure secondary to a recurrent pectus excavatum deformity is illustrated by this case. Our patient did not respond with the same rapid improvement of the cardiorespiratory state observed in those undergoing uncomplicated initial pectus excavatum repair.[2,3,5] The recurrence of the pectus deformity following surgery led to a rigid noncompliant, nonexpansile thoracic cavity which restricted normal lung development. With growth there was accentuation of the congenital deformity, and the kyphosis, normally prevented by a

TABLE

*Pulmonary Function Studies**

	Predicted	Admit	Discharge	Seven-Month Followup
IC (liters)	3.81	0.54	0.68	0.77
ERV (liters)	1.88	0.24	0.27	0.52
VC (liters)	5.69	0.79	0.95	1.30
$FEF_{25\ to\ 75\%}$ (L/sec)	5.34	2.5	2.0	3.13
FVC (liters)	5.69	0.79	0.90	1.29
FEV_1 (liters)	4.61	0.73	0.90	1.25
PF (L/min)	328	306	182	244
FEV_1 /FVC (%)	81	93	100	97
FEV_3 /FVC (%)	95	100	100	100

*Pulmonary function tests (obtained on initial hospitalization, first hospital discharge, and seven-month followup visit) included inspiratory capacity (IC), expiratory reserve volume (ERV), vital capacity (VC), peak flow (PF), maximum mid-expiratory flow rate ($FEF_{25\ to\ 75\%}$), expired volume at one second (FEV_1), ratio of FEV_1 to forced vital capacity (FVC), and the ratio of expired volume at three seconds (FEV_3) to FVC.

good initial repair, was aggravated. Since lung development was limited during the child's growth, alveolar hypoventilation occurred resulting in hypoxia, hypercarbia, and right heart failure. Release of the rigid cartilageous plate-like chest wall was not accompanied by immediate improvement of the respiratory state. Small lungs with alveolar hypoplasia was the most likely cause for the limited postoperative improvement.[9] Similar results have been reported following surgery in patients with kyphoscoliosis in whom there is an initial decrease in respiratory dynamics followed by a slow return to preoperative levels.[6-8]

Though initial improvement of this patient's respiratory status was not observed, there was a trend toward improved respiratory dynamics at the seven-month followup. All lung volumes and capacities had increased by 25 to 100 percent (Table) though still falling well below predicted levels. Therefore, though immediate respiratory improvement cannot be expected, the cramped underdeveloped lung eventually will expand once the restrictive thoracic wall is released. These patients must be considered candidates for long-term ventilatory support. Early tracheostomy decreases dead space and also allows versatility in handling the long-term respiratory care.[10] Attempts at rapid weaning from ventilatory support are ill advised and prolonged use of limited ventilatory care is necessary. For our patient use of the ventilator only during sleep periods was adequate and allowed the patient to return to a full and active life.

Nutritional support was another important aspect in this patient's postoperative care. On his initial admission, the patient was nutritionally depleted from increased energy expenditure for breathing. During the convalescent period the patient's 4,000 calorie diet was supplemented with two liters of nutramigen a day (2,000 calories) and he had gained ten pounds prior to discharge.

CONCLUSION

Recurrence of a severe pectus deformity following surgery can lead to retardation of the lung development and eventual cardiorespiratory failure. Therefore, early reoperation for a recurrent pectus deformity is advised. Should a patient present in cardiorespiratory failure from recurrent pectus deformity, surgical intervention will not immediately improve the respiratory state though long-term gains can be observed. Extended ventilatory support should be anticipated and provided for these patients following surgery.

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J-4044 January 1984

Case Report: Approach to the Diagnosis of Sea-Blue Histiocytosis in a Community Setting

Joseph Napolitano, M.D., Juan A. Hernandez, M.D., Anthony C. Giardina, M.D., Richard Freundlich, M.D., Elizabeth*

Moeschlin described the syndrome of sea-blue histiocytosis upon observing deep blue macrophages with May-Grünwald stain in the spleen of a 29-year-old man. Since that time a syndrome has evolved and has been characterized. This report represents such a case.

The syndrome of sea-blue histiocytosis first was noted by Moeschlin[8] in 1947, in the spleen, and reaffirmed three years later by Wewalka[1] in the bone marrow. Silverstein and coworkers summarized nine cases in 1970.[2] The syndrome which was elucidated is characterized by hepatosplenomegaly, mild thrombocytopenia, and a relatively benign course, but the precise metabolic and genetic aspects had not been established clearly.[3]

Within the cytoplasm of the sea-blue histiocyte, there are variable amounts of pale blue staining granules. These granules are composed of a ceroid (Greek for "waxlike") which evolves from the oxidation and polymerization of unsaturated lipids that appear in histiocytes in a variety of diseases.

The finding of sea-blue histiocytes in the bone marrow is not pathognomic for ceroid. Therefore, its presence should be confirmed by histochemical studies, most of which are within the realm of a community hospital.

CASE REPORT

The patient is a 67-year-old white woman who initially was seen in the hematology clinic in November 1981 for splenomegaly (documented by liver/spleen scan) and a platelet count of 70,000. Bone marrow aspiration at that time showed an increase in red cell production with diminished iron stores but without a causative factor.

The patient continued to visit the hematology clinic until April 1982, when she complained of left upper quadrant pains. Her platelet count was 44,000. She was hospitalized and a splenectomy and liver biopsy were performed to alleviate the symptomatology and determine the etiology of the disease process.

During the more than one year followup, the patient has been asymptomatic and her platelet counts have been in the range of 168,000 to 230,000. One should note that the patient has not developed any neurologic, pulmonary, nor ophthalmic symptomatology as documented by previous authors.[3]

PATHOLOGY

The spleen was received in the fresh state from the operating room. The enlarged organ measured 21 x 14 x 7 cm and weighed 920 gm. Anatomically, the structure maintained its usual configuration and the capsular surface was smooth in appearance. Its consistency was rubbery; a step-section revealed the

*From the Department of Pathology, St. Elizabeth Hospital, where Dr. Napolitano is Assistant Pathologist, Dr. Hernandez is Associate Director, and Dr. Giardina is Director of Laboratories, and from the Department of Medicine where Dr. Freundlich is a second year medical resident. Correspondence may be addressed to Dr. Napolitano, Department of Pathology, St. Elizabeth Hospital, 225 Williamson Street, Elizabeth, NJ 07207.

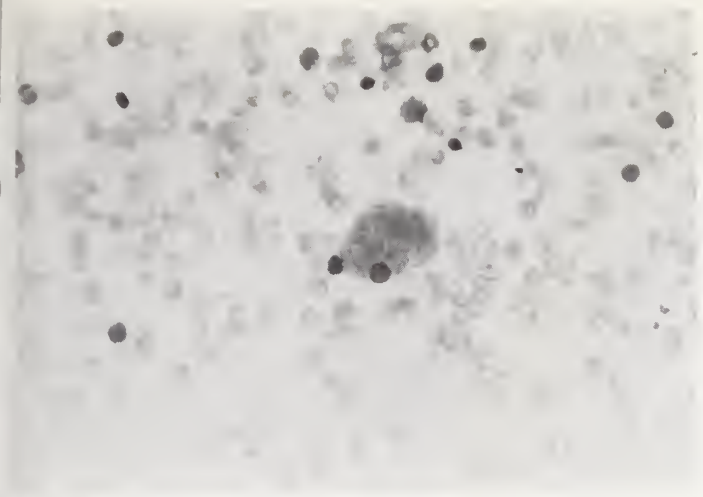


Figure 1—Splenic imprint showing sea-blue histiocyte.

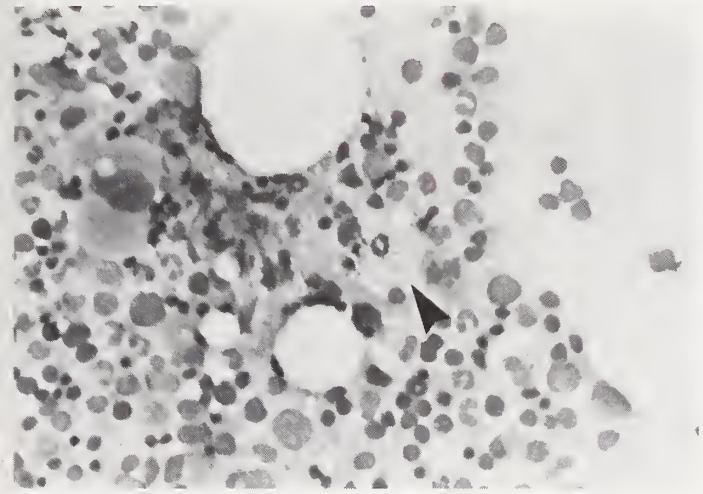


Figure 2—Bone marrow with sea-blue histiocyte (arrow).

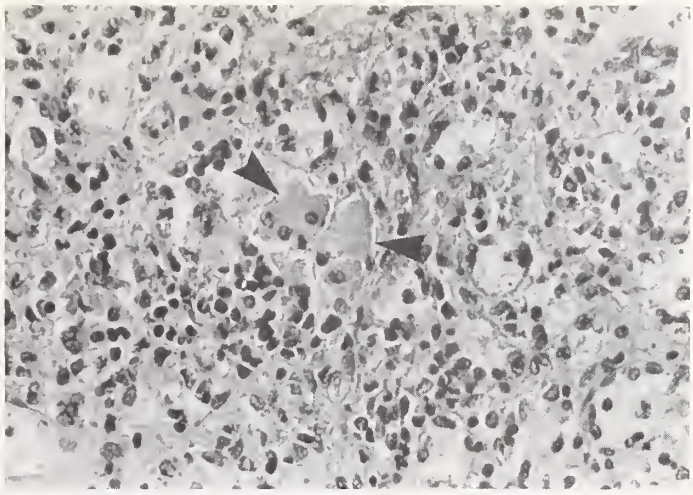


Figure 3—Section of spleen with cluster of sea-blue histiocytes (arrows).

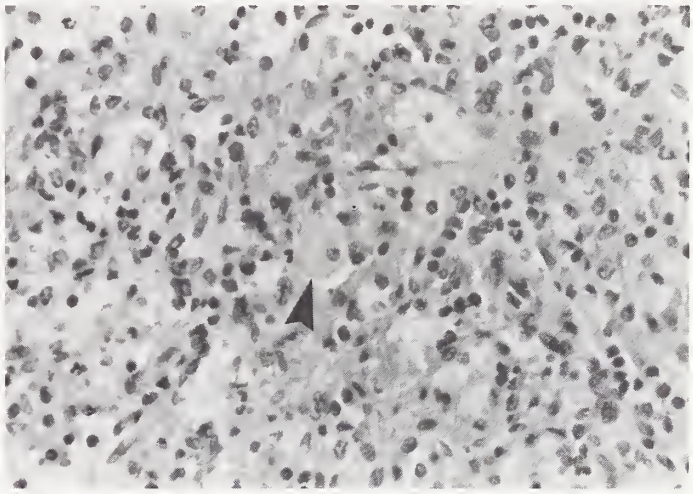


Figure 4—Section of spleen with single sea-blue histiocyte (arrow).

spleen to be plethoric with a considerable amount of fluid blood recovered. The cut surface was homogenous and "liver-like" in appearance. No nodular masses were noted and the usual follicular background was discernible.

Imprints of the cut surfaces revealed the usual hematologic elements together with a number of sea-blue histiocytes which easily were observed using the Giemsa stain.

Histologic sections of the formalin-fixed tissue showed marked engorgement of the splenic sinusoids. Scattered throughout the sections were numerous individual and clustered histiocytes containing granules that stained light brown with routine hematoxylin-eosin.

At this point, a battery of special stains, including PAS, acid-fast, reticulin, and Giemsa, were ordered on the tissue section together with a review of the original biopsy. The clinician was advised of our working diagnosis of ceroid histiocytosis and he initiated the clinical studies to eliminate "look-alike" entities.

Also submitted at the time of surgery was a 1 cm wedge of hepatic tissue which on microscopy demonstrated the presence of sea-blue histiocytes in the hepatic sinusoids.

DISCUSSION

The purpose of this presentation is to demonstrate how the diagnosis of sea-blue histiocytosis may be confirmed in the setting of a community hospital with limited resources. Furthermore, by this presentation we wish to urge our colleagues to do splenic imprints and smears postsplenectomy, particularly in instances of questionable or unknown etiology in order to facilitate the microscopic diagnosis.

As in this case, once the observation of crowding of the spleen with histiocytes is documented, this data must be conveyed to the clinician because ceroid histiocytosis is a diagnosis of exclusion. Sea-blue histiocytes are seen in many conditions: leukemia, cirrhosis of the liver, sickle cell anemia, Tay-Sachs disease, and others.[2] After the clinician has ruled out the numerous other possible disease entities, he confidently can consider sea-blue histiocytosis as the final clinical diagnosis.

The sea-blue histiocyte is 20 to 60 mm in diameter with a single eccentric nucleus. Although the chromation is condensed, a nucleolus is discernible.[4] Within the cytoplasm, the ceroid granules stain sea blue with the Wright or Giemsa stains.[5] This stain is not pathognomic for ceroid. Therefore, other histochemical studies should be carried out to confirm the diagnosis of ceroid.

Ceroid is insoluble in hydrocarbon lipid solvents and, thus, is positive with both oil red O and Sudan black. With routine hematoxylin-eosin the ceroid granules are stained light brown in color while with PAS the granulas are reddish. Furthermore, acid-fast and reticulin stains also are of assistance in that the ceroid granules are reddish-brown with acid-fast and gray-

black with reticulin. The granules have a strong affinity for basic dyes such as methylene blue. They also have a greenish-yellow autofluorescence which fades to pale yellow on frozen section.[7]

This case is of interest in that it demonstrates the relative ease of observing sea-blue histiocytes on imprints of surgical specimens without the need of excessive and costly additional techniques. Although the bone marrow was not diagnostic, in retrospect, it did show an occasional foamy histiocyte.

The splenectomy was performed because of the thrombocytopenia and pain from the enlarged organ. Close followup is essential because numerous authors have stressed a progressively downhill course post-splenectomy. One thought is that these histiocytes will continue to invade other vital organs such as lung and liver after splenectomy. Other authors have stated that splenectomy does not alter the patient's course.[8]

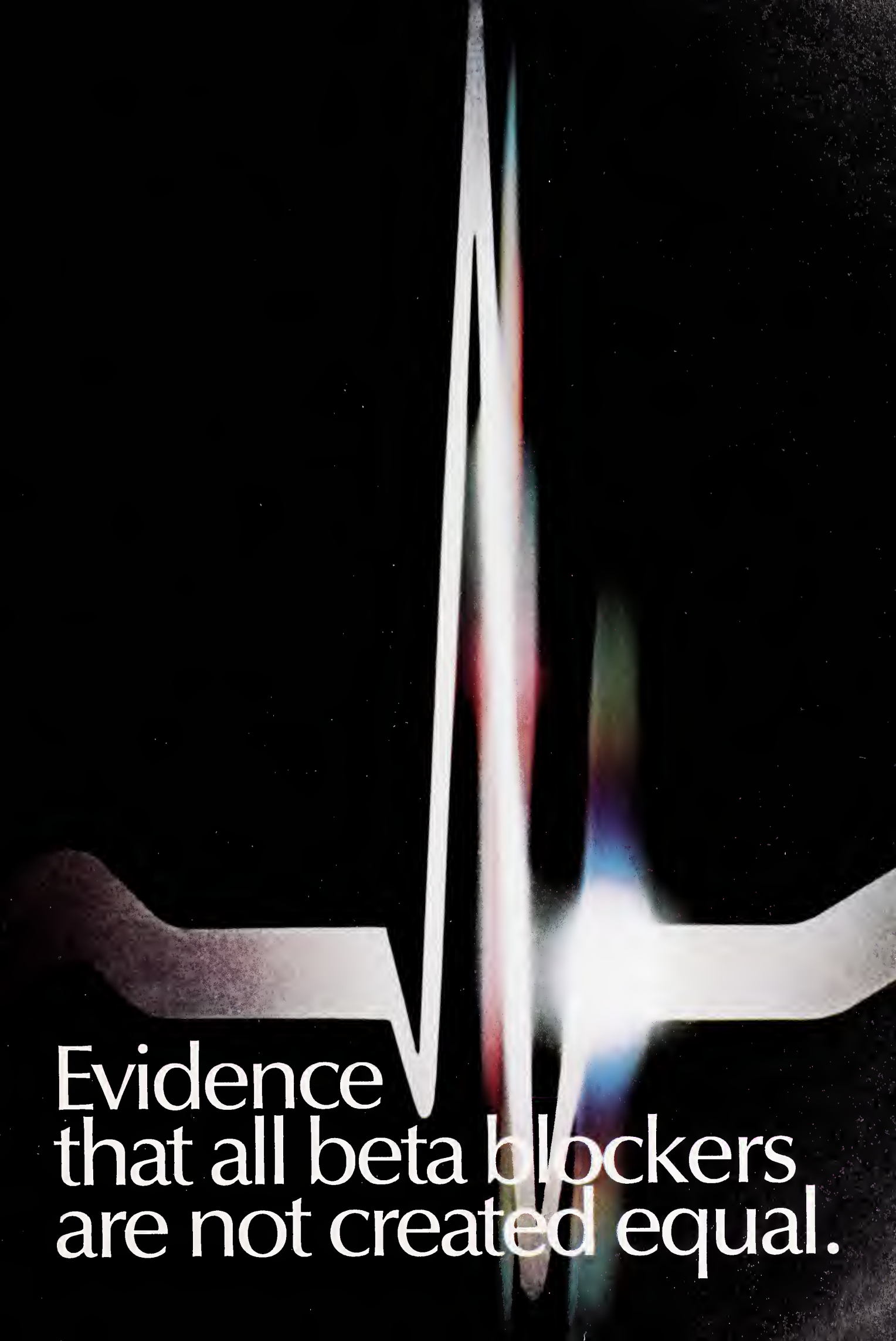
Diabetes mellitus has been documented but no correlation has been recorded showing pancreatic infiltration by sea-blue histiocytes.[9] Although our patient had histiocytes in the liver, they appeared confined to the hepatic sinusoids and not the parenchyma of the organ.

Our case also is unusual in that the age of onset was quite late; there is a lack of any observable familial etiology; and none of the classical sequelae as yet have evolved.

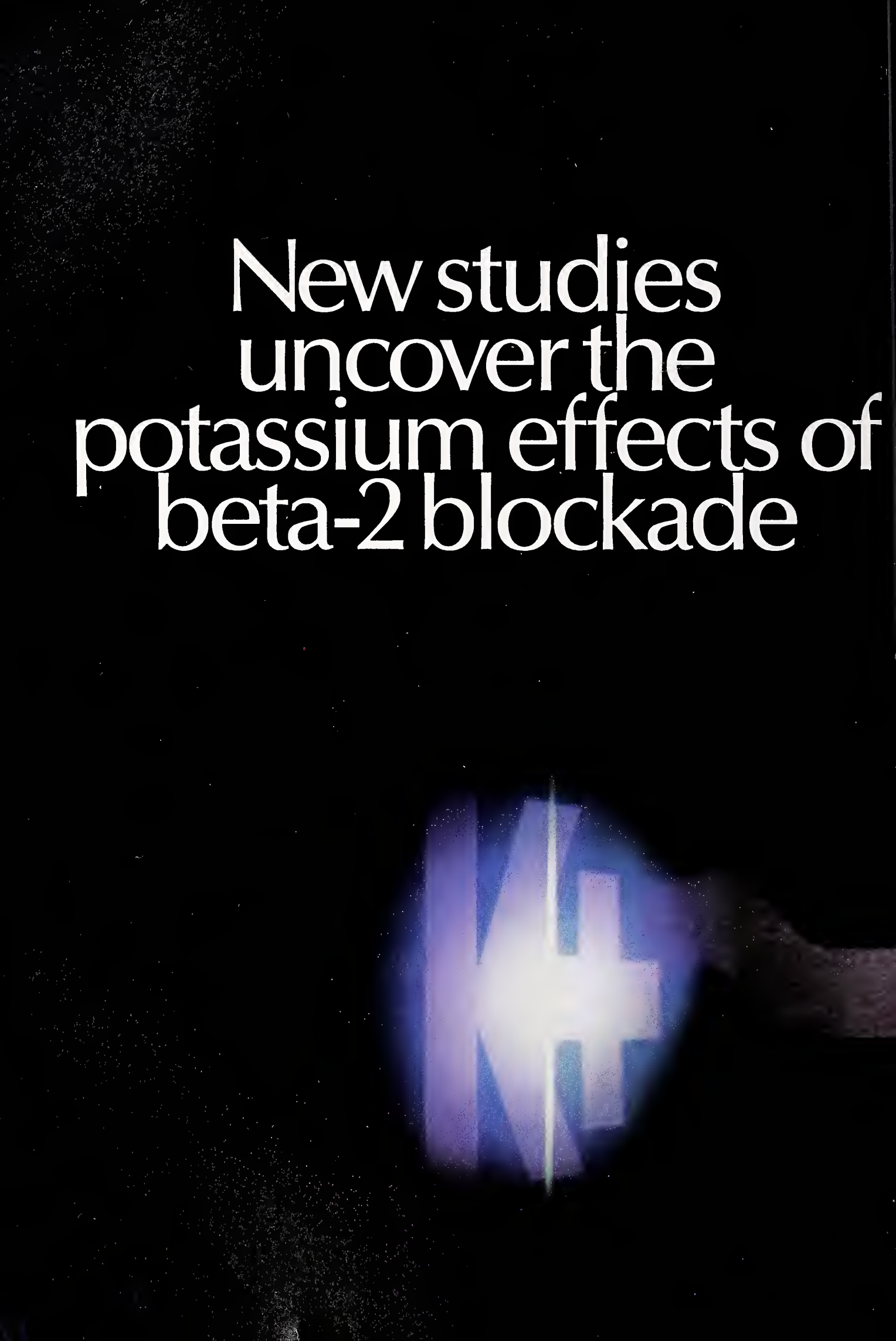
We present and emphasize a methodology for application in the community hospital laboratory as to the approach and diagnosis of this still elusive syndrome.

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Evidence
that all beta blockers
are not created equal.

New studies uncover the potassium effects of beta-2 blockade



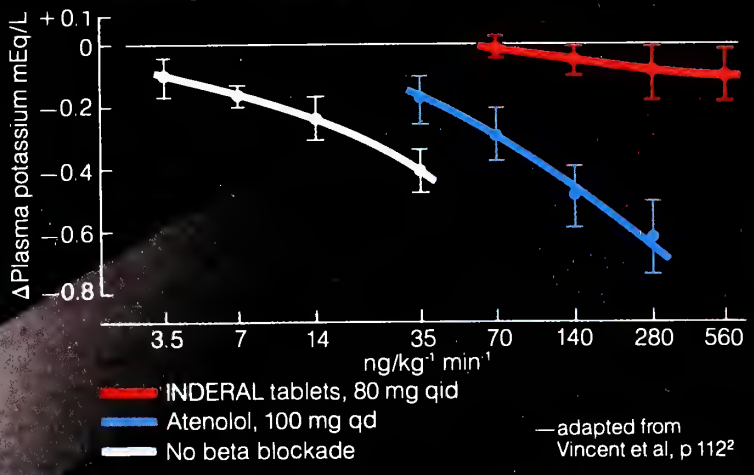
Clinical pharmacology data from the *New England Journal of Medicine:*

"...when normal young men are given infusions of epinephrine at levels such as those that circulate in patients with myocardial infarction, their serum potassium concentrations fall by about 0.8 mmol per liter. Hypokalemia is prevented by...beta-2 blockade."[1]

INDERAL (propranolol HCl) prevented beta-2 mediated hypokalemia

In a pharmacological study comparing INDERAL with atenolol, 10 hypertensive patients were infused with the nonselective beta agonist, isoproterenol, which also stimulates beta-2 mediated hypokalemia. At doses high enough to overcome beta-1 mediated heart rate reductions, the hypokalemia caused by isoproterenol was blunted by INDERAL, but not by atenolol.[2]

INDERAL compared with atenolol: change in plasma potassium after beta-agonist infusion[2]



—adapted from Vincent et al, p 112[2]

For beta-1/beta-2 blockade INDERAL® (PROPRANOLOL HCl) TABLETS

Please see last page for brief summary of prescribing information.

Epinephrine-induced hypokalemia can intensify diuretic-induced hypokalemia



From the *Lancet:*

"Although both diuretics and adrenaline are known to cause hypokalaemia, we believe that this is the first demonstration that these two factors can act in an additive manner. Routine monitoring of serum potassium in patients on thiazide diuretics may underestimate the risks of hypokalaemia."[3]

Epinephrine drives potassium into cells—an effect that has been shown to be under beta-2 receptor control[4]; thiazides promote excretion of potassium. When these actions occur together, hypokalemia can intensify significantly.[3]

Epinephrine-induced hypokalemia can cause ECG abnormalities typical of other forms of hypokalemia

In a study of the effects of epinephrine-induced hypokalemia on the electrocardiogram, it was shown that levels of plasma epinephrine similar to those observed during myocardial infarction can produce changes in ventricular repolarization, which are reflected in T-wave flattening and QT prolongation in normal subjects.[5]

In clinical pharmacology studies of hypertensive and normal patients, epinephrine-induced hypokalemia was prevented by beta-2 blockade.[2,4]

For beta-1/beta-2 blockade

INDERAL®

(PROPRANOLOL HCl) TABLETS

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Right from the start in hypertension...



Once-daily INDERAL LA (propranolol HCl) for smooth blood pressure control without the potassium problems of diuretics

Patients with "uncomplicated" hypertension may develop ventricular arrhythmias in the presence of hypokalemia.[6] Once-daily INDERAL LA maintains smooth blood pressure reductions without a negative effect on serum potassium and provides patients with broad cardiovascular benefits—all in a convenient daily dose.

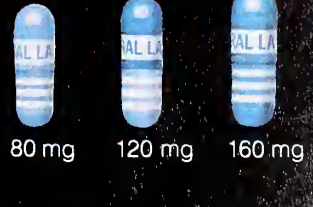
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10 mg 20 mg 40 mg 60 mg 80 mg 90 mg

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BRIEF SUMMARY *(FOR FULL PRESCRIBING INFORMATION, SEE PACKAGE CIRCULARS.)*
INDERAL® (propranolol hydrochloride) **Tablets and Injectable**
INDERAL® LA (propranolol hydrochloride) **Long Acting Capsules**

INDICATIONS AND USAGE—INDERAL Tablets

Hypertension: INDERAL (propranolol hydrochloride) is indicated in the management of hypertension. It may be used alone or used in combination with other antihypertensive agents, particularly a thiazide diuretic. INDERAL is not indicated in the management of hypertensive emergencies.

Angina Pectoris Due to Coronary Atherosclerosis: INDERAL is indicated for the long-term management of patients with angina pectoris.

Cardiac Arrhythmias:

1.) Supraventricular arrhythmias

a) Paroxysmal atrial tachycardias, particularly those arrhythmias induced by catecholamines or digitalis or associated with the Wolff-Parkinson-White syndrome. (See W-P-W under WARNINGS.) b) Persistent sinus tachycardia which is noncompensatory and impairs the well-being of the patient. c) Tachycardias and arrhythmias due to thyrotoxicosis when causing distress or increased hazard and when immediate effect is necessary as adjunctive, short term (2-4 weeks) therapy. May be used with, but not in place of, specific therapy. (See Thyrotoxicosis under WARNINGS.) d) Persistent atrial extrasystoles which impair the well-being of the patient and do not respond to conventional measures. e) Atrial flutter and fibrillation when ventricular rate cannot be controlled by digitalis alone, or when digitalis is contraindicated.

2.) Ventricular tachycardias

Ventricular arrhythmias do not respond to propranolol as predictably as do the supraventricular arrhythmias. a)Ventricular tachycardias. With the exception of those induced by catecholamines or digitalis, INDERAL is not the drug of first choice. In critical situations when cardioversion technics or other drugs are not indicated or are not effective, INDERAL may be considered. If, after consideration of the risks involved, INDERAL is used, it should be given intravenously in low dosage and very slowly. (See DOSAGE AND ADMINISTRATION.) *Care in the administration of* INDERAL *with constant electrocardiographic monitoring is essential as the failing heart requires some sympathetic drive for maintenance of myocardial tone.* b) Persistent premature ventricular extrasystoles which do not respond to conventional measures and impair the well-being of the patient.

3.) Tachyarrhythmias of digitalis intoxication

If digitalis-induced tachyarrhythmias persist following discontinuance of digitalis and correction of electrolyte abnormalities, they are usually reversible with oral INDERAL. Severe bradycardia may occur. (See OVERDOSAGE.) Intravenous propranolol hydrochloride is reserved for life-threatening arrhythmias. Temporary maintenance with oral therapy may be indicated. (See DOSAGE AND ADMINISTRATION in the package circulars.)

4.) Resistant tachyarrhythmias due to excessive catecholamine action during anesthesia. Tachyarrhythmias due to excessive catecholamine action during anesthesia may sometimes arise because of release of endogenous catecholamines or administration of catecholamines. When usual measures fail in such arrhythmias, INDERAL may be given intravenously to abolish them. All general inhalation anesthetics produce some degree of myocardial depression. Therefore, when INDERAL (propranolol hydrochloride) is used to treat arrhythmias during anesthesia, it should be used with extreme caution and constant ECG and central venous pressure monitoring. (See WARNINGS.)

Myocardial Infarction: INDERAL is indicated to reduce cardiovascular mortality in patients who have survived the acute phase of myocardial infarction and are clinically stable.

Migraine: INDERAL is indicated for the prophylaxis of common migraine headache. The efficacy of propranolol in the treatment of a migraine attack that has started has not been established and propranolol is not indicated for such use.

Hypertrophic Subaortic Stenosis: INDERAL is useful in the management of hypertrophic subaortic stenosis, especially for treatment of exertional or other stress-induced angina, palpitations, and syncope. INDERAL also improves exercise performance. The effectiveness of propranolol hydrochloride in this disease appears to be due to a reduction of the elevated outflow pressure gradient which is exacerbated by beta receptor stimulation. Clinical improvement may be temporary.

Pheochromocytoma: After primary treatment with an alpha-adrenergic blocking agent has been instituted, INDERAL may be useful as *adjunctive* therapy if the control of tachycardia becomes necessary before or during surgery.

It is hazardous to use INDERAL unless alpha-adrenergic blocking drugs are already in use, since this would predispose to serious blood pressure elevation. Blocking only the peripheral dilator (beta) action of epinephrine leaves its constrictor (alpha) action unopposed.

In the event of hemorrhage or shock, there is a disadvantage in having both beta and alpha blockade since the combination prevents the increase in heart rate and peripheral vasoconstriction needed to maintain blood pressure.

With inoperable or metastatic pheochromocytoma, INDERAL may be useful as an adjunct to the management of symptoms due to excessive beta receptor stimulation.

INDICATIONS AND USAGE—INDERAL LA Long Acting Capsules

Hypertension: INDERAL LA (propranolol hydrochloride) is indicated in the management of hypertension; it may be used alone or used in combination with other antihypertensive agents, particularly a thiazide diuretic. INDERAL LA is not indicated in the management of hypertensive emergencies.

Angina Pectoris Due to Coronary Atherosclerosis: INDERAL LA is indicated for the long-term management of patients with angina pectoris.

Migraine: INDERAL LA is indicated for the prophylaxis of common migraine headache. The efficacy of propranolol in the treatment of a migraine attack that has started has not been established and propranolol is not indicated for such use.

Hypertrophic Subaortic Stenosis: INDERAL LA is useful in the management of hypertrophic subaortic stenosis, especially for treatment of exertional or other stress-induced angina, palpitations, and syncope. INDERAL LA also improves exercise performance. The effectiveness of propranolol hydrochloride in this disease appears to be due to a reduction of the elevated outflow pressure gradient which is exacerbated by beta-receptor stimulation. Clinical improvement may be temporary.

CONTRAINDICATIONS. INDERAL and INDERAL LA are contraindicated in 1) cardiogenic shock; 2) sinus bradycardia and greater than first degree block; 3) bronchial asthma; 4) congestive heart failure (see WARNINGS) unless the failure is secondary to a tachyarrhythmia treatable with INDERAL.

WARNINGS. CARDIAC FAILURE: Sympathetic stimulation may be a vital component supporting circulatory function in patients with congestive heart failure, and its inhibition by beta blockade may precipitate more severe failure. Although beta blockers should be avoided in overt congestive heart failure, if necessary, they can be used with close follow-up in patients with a history of failure who are well compensated and are receiving digitalis and diuretics. Beta-adrenergic blocking agents do not abolish the inotropic action of digitalis on heart muscle.

IN PATIENTS WITHOUT A HISTORY OF HEART FAILURE, continued use of beta blockers can, in some cases, lead to cardiac failure. Therefore, at the first sign or symptom of heart failure, the patient should be digitalized and/or treated with diuretics, and the response observed closely, or INDERAL should be discontinued (gradually, if possible).

IN PATIENTS WITH ANGINA PECTORIS, there have been reports of exacerbation of angina and, in some cases, myocardial infarction, following abrupt discontinuance of INDERAL (propranolol hydrochloride) therapy. Therefore, when discontinuance of INDERAL is planned the dosage should be gradually reduced over at least a few weeks, and the patient should be cautioned against interruption or cessation of therapy without the physician's advice. If INDERAL therapy is interrupted and exacerbation of angina occurs, it usually is advisable to reinstitute INDERAL therapy and take other measures appropriate for the management of unstable angina pectoris. Since coronary artery disease may be unrecognized, it may be prudent to follow the above advice in patients considered at risk of having occult atherosclerotic heart disease who are given propranolol for other indications.

Nonallergic Bronchospasm (e.g., chronic bronchitis, emphysema)—PATIENTS WITH BRONCHOSPASTIC DISEASES SHOULD IN GENERAL NOT RECEIVE BETA BLOCKERS. INDERAL should be administered with caution since it may block bronchodilation produced by endogenous and exogenous catecholamine stimulation of beta receptors.

MAJOR SURGERY: The necessity or desirability of withdrawal of beta-blocking therapy prior to major surgery is controversial. It should be noted, however, that the impaired ability of the heart to respond to reflex adrenergic stimuli may augment the risks of general anesthesia and surgical procedures.

INDERAL, like other beta blockers, is a competitive inhibitor of beta-receptor agonists and its effects can be reversed by administration of such agents, e.g., dobutamine or isoproterenol. However, such patients may be subject to protracted severe hypotension. Difficulty in starting and maintaining the heartbeat has also been reported with beta blockers.

DIABETES AND HYPOGLYCEMIA: Beta-adrenergic blockade may prevent the appearance of certain premonitory signs and symptoms (pulse rate and pressure changes) of acute hypoglycemia in labile insulin-dependent diabetes. In these patients, it may be more difficult to adjust the dosage of insulin.

THYROTOXICOSIS: Beta blockade may mask certain clinical signs of hyperthyroidism. Therefore, abrupt withdrawal of propranolol may be followed by an exacerbation of symptoms of hyperthyroidism, including thyroid storm. Propranolol does not distort thyroid function tests.

IN PATIENTS WITH WOLFF-PARKINSON-WHITE SYNDROME, several cases have been reported in which, after propranolol, the tachycardia was replaced by a severe bradycardia requiring a demand pacemaker. In one case this resulted after an initial dose of 5 mg propranolol.

PRECAUTIONS. *General:* Propranolol should be used with caution in patients with impaired hepatic or renal function. INDERAL is not indicated for the treatment of hypertensive emergencies.

Beta adrenoreceptor blockade can cause reduction of intraocular pressure. Patients should be told that INDERAL may interfere with the glaucoma screening test. Withdrawal may lead to a return of increased intraocular pressure.

Clinical Laboratory Tests: Elevated blood urea levels in patients with severe heart disease, elevated serum transaminase, alkaline phosphatase, lactate dehydrogenase.

DRUG INTERACTIONS: Patients receiving catecholamine-depleting drugs such as reserpine should be closely observed if INDERAL is administered. The added catecholamine-blocking action may produce an excessive reduction of resting sympathetic nervous activity which may result in hypotension, marked bradycardia, vertigo, syncopal attacks, or orthostatic hypotension.

Carcinogenesis, Mutagenesis, Impairment of Fertility: Long-term studies in animals have been conducted to evaluate toxic effects and carcinogenic potential. In 18-month studies in both rats and mice, employing doses up to 150 mg/kg/day, there was no evidence of significant drug-induced toxicity. There were no drug-related tumorigenic effects at any of the dosage levels. Reproductive studies in animals did not show any impairment of fertility that was attributable to the drug.

Pregnancy: Pregnancy Category C. INDERAL has been shown to be embryotoxic in animal studies at doses about 10 times greater than the maximum recommended human dose.

There are no adequate and well-controlled studies in pregnant women. INDERAL should be used during pregnancy only if the potential benefit justifies the potential risk to the fetus.

Nursing Mothers: INDERAL is excreted in human milk. Caution should be exercised when INDERAL is administered to a nursing woman.

Pediatric Use: Safety and effectiveness in children have not been established.

ADVERSE REACTIONS. Most adverse effects have been mild and transient and have rarely required the withdrawal of therapy.

Cardiovascular: bradycardia; congestive heart failure; intensification of AV block; hypotension; paresthesia of hands; thrombocytopenic purpura; arterial insufficiency, usually of the Raynaud type.

Central Nervous System: Lightheadedness; mental depression manifested by insomnia, lassitude, weakness, fatigue; reversible mental depression progressing to catatonia; visual disturbances; hallucinations; an acute reversible syndrome characterized by disorientation for time and place, short-term memory loss, emotional lability, slightly clouded sensorium, and decreased performance on neuropsychometrics.

Gastrointestinal: nausea, vomiting, epigastric distress, abdominal cramping, diarrhea, constipation, mesenteric arterial thrombosis, ischemic colitis.

Allergic: pharyngitis and agranulocytosis, erythematous rash, fever combined with aching and sore throat, laryngospasm and respiratory distress.

Respiratory: bronchospasm.

Hematologic: agranulocytosis, nonthrombocytopenic purpura, thrombocytopenic purpura.

Auto-Immune: In extremely rare instances, systemic lupus erythematosus has been reported.

Miscellaneous: alopecia, LE-like reactions, psoriasiform rashes, dry eyes, male impotence, and Peyronie's disease have been reported rarely. Oculomucocutaneous reactions involving the skin, serous membranes and conjunctivae reported for a beta blocker (practolol) have not been associated with propranolol.

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Pharmacological Basis of Therapeutics: Vascular α-Adrenoceptors*

Charles O. Brostrom, Ph.D.**

Two types of α-adrenoceptors in conjunction with β-adrenoceptors, impose adrenergic regulation on the contraction of smooth muscle associated with vascular resistance vessels. The two forms of α-adrenoceptor exhibit differential responses to α-adrenergic agonists and antagonists and appear to have different mechanisms of action and distributions at adrenergic synapses with pressor vascular smooth muscle.

Occasionally a scientific paper appears which ultimately remolds the conceptual thinking devoted to an entire body of biomedical research and therapeutics. One such publication was "A Study of the Adrenotropic Receptors" authored by Raymond P. Ahlquist in 1948 in which catecholamines were described as acting at multiple receptors.[1] It was proposed that excitatory effects of catecholamines, such as the triggering of smooth muscle contraction, usually originate following binding at "alpha" adrenergic receptors whereas inhibitory actions, such as the relaxation of smooth muscle, were thought to arise ordinarily following binding of catecholamine to "beta" adrenergic receptors. This hypothesis contrasted sharply with the then prevalent view that sympathetic agonists were either purely excitatory (sympathin E) or inhibitory (sympathin I), and emphasized as well the important determinant properties of the receptor in agonist action.

Due to the accelerating pace of biomedical research, Ahlquist, who lived until 1983, enjoyed the personal satisfaction of observing the impact of this insight on continuing research devoted to biogenic amines. Selective agonists and antagonists were developed for the alpha and beta adrenoceptors that Ahlquist had earlier predicated, and each receptor type was further subclassified (α_1, α_2, β_1, β_2).[2] While much has been learned regarding the pharmacology and functioning of the various adrenoceptors, continuing experimentation has revealed enormous complexity and ample room for scientific controversy. One aspect of this area which is progressing particularly rapidly and which holds considerable promise for developing future therapeutic agents is the characterization of α-adrenoceptor subtypes, distribution, and properties. The following text briefly will summarize current understanding of the α-adrenoceptor system, particularly with respect to the functioning of the vascular smooth muscle of resistance vessels.

The intravenous administration of a single dose of epinephrine to a pithed or anesthetized animal normally produces a biphasic response in blood pressure, consisting of a rapid but transient rise and a slow fall of longer duration. In large part, these effects on pres-

*This article, seventh in a series, prepared under the leadership of Bruce McL. Breckenridge, M.D., Chairman, Department of Pharmacology, UMDNJ-Rutgers Medical School, is a brief review of recent advances in pharmacology and related preclinical sciences, which will help readers to understand the action of new and established therapeutic agents. The reviews do not consider indications for specific drugs, incompatibilities, or dosage forms, which can be found in the *AMA Drug Evaluations, 5th Edition*, 1983.

**From the Department of Pharmacology, UMDNJ-Rutgers Medical School, Piscataway, NJ 08854. Correspondence may be addressed to Bruce McL. Breckenridge, M.D., Chairman, Department of Pharmacology, UMDNJ-Rutgers Medical School, P.O. Box 101, Piscataway, NJ 08854.

sure which occur in response to the catecholamine, reflect changes in the balance between contraction (α-adrenoceptor mediated) and relaxation (β-adrenoceptor mediated) of vascular smooth muscle of small arteries and arterioles associated with maintaining peripheral resistance to blood flow. Selective antagonists (Table) for either α- or β-adrenoceptors will eliminate, respectively, either the rise or fall in pressure. In practical terms, numerous substances in addition to catecholamines affect peripheral resistance, therefore, changes in vascular tone are superimposed upon a background provided by other humoral agents. It is important to recognize that it is so difficult to isolate small vessels for direct study that much of the currently available detail relating to vascular adrenoceptors has been generated using isolated preparations of larger vessels or perfused beds possessing a mixture of blood vessels.

During the past ten years a variety of substances including α-adrenoceptor agonists, adenosine, prostaglandins of the E series, dopamine, muscarinic cholinergic agonists, histamine, serotonin, and opioids have been reported to reduce the release of norepinephrine from the adrenergic nerve terminals of vascular smooth muscle.[3] In contrast β-adrenergic agonists, nicotinic cholinergic agonists, angiotensin, and probably prostaglandins of the F series have been found to increase norepinephrine release and, hence, to increase the intensity of adrenergic nerve transmission. Of these presynaptic receptors, the α-adrenoceptor has been hypothesized to be the most important as a putative regulator of adrenergic neuro-transmission and is surely the most thoroughly studied.[4] It is clear that those α-adrenergic agonists and antagonists which interact with the presynaptic α-adrenoceptor have a different rank of order of potencies than was found for the same agents acting at the α-adrenoceptors on vascular smooth muscle. On this basis the predominant form of presynaptic α-adrenoceptor was determined to be α_2 whereas that associated with vascular smooth was α_1. This discovery led to the controversial hypothesis that α_2-adrenoceptors at the presynaptic adrenergic nerve varicosities control norepinephrine output through responding to norepinephrine in the synaptic cleft by inhibiting further release of the catecholamine, thus providing negative feedback regulation.[5] While this hypothesis adequately described the behavior of various adrenergic synapses responding to either exogenous catecholamine or sympathetic nerve stimulation in the presence of added, nonselective α-adrenergic antagonists, it fell short of explaining the behavior of adrenergic synapses associated with resistance vasculature. Pressor innervation proved to be relatively insensitive to α_2-adrenoceptor-mediated control of norepinephrine release, probably because the much larger synaptic cleft in these areas and the intermittency of catecholamine release do not favor sufficient accumulation of norepinephrine to activate the presynaptic receptor.[6]

The postsynaptic smooth muscle cells of resistance vessels now are known to possess both forms of α-adrenoceptor, each of which can contribute to the overall pressor effect.[7] Circulating catecholamines at low concentrations preferentially activate α_2-adrenoceptors and readily are blocked by α_2-selective antagonists. In contrast, the stimulation of pressor nerves at high frequency primarily activates α_1-adrenoceptors as confirmed by α_1-selective blocking agents. On first appraisal one might suspect that these differences are likely to arise from differences in surface distribution of the two adrenoceptor types but that conclusion is not entirely sustained by additional information. It is known, for example, that decreasing frequencies of pressor nerve stimulation in the rabbit introduce an important component of α_2-adrenoceptor mediated smooth muscle contraction.[7] In addition, as one increases the concentration of exogenous norepinephrine, effects on resistance vessels progress from α_2- to predominately α_1-adrenoceptor effects. Nonselective α-adrenergic agonists promote an initial rapid α_1-adrenoceptor mediated rise in blood pressure that decays into a prolonged phase which is mediated in large part by an α_2-adrenoceptor. At the time of peak response, only the α_1-adrenoceptor component is seen. To summarize, prolonged exposure of resistance vasculature to low concentrations of norepinephrine either from pressor nerve stimulation or added exogenously, produces largely α_2-adrenoceptor stimulation whereas acute exposure to higher concentrations of the catecholamine predominantly activates α_1-adrenoceptors. These differences could conceivably

TABLE

Common Agonists and Antagonists at Adrenoceptors

α-Adrenoceptors	**Nonselective**	**α_1-Selective**	**α_2-Selective**
α-adrenergic agonists	norepinephrine**	methoxamine	clonidine, -methyl norepinephrine
α-adrenergic antagonists	phentolamine, phenoxybenzamine	prazosin corynanthine	yohimbine, rauwolscine
β-Adrenoceptors	**Nonselective**	**β_1-Selective**	**β_2-Selective**
β-adrenergic agonists	isoproterenol	dobutamine	terbutaline, ritodrine
β-adrenergic antagonists	propranolol, timolol	metoprolol, atenolol	butoxamine

The selectivities of the above agents as noted in the text frequently are concentration dependent.
**Norepinephrine also activates β_1-adrenoceptors.

be related to variations in the mechanism of action of the two respective α-adrenoceptors, including a possible differential tendency to undergo tachyphylaxis.

The two most prominent and best established regulatory substances mediating the intracellular actions of rapidly acting extracellular humoral agents are adenosine 3',5' cyclic monophosphate and Ca^{2+}. In contrast to β-adrenoceptors, which generally are considered to respond to agonists by activating adenylate cyclase and hence increasing cAMP concentrations,[8] α-adrenoceptors respond to agonists by mobilizing Ca^{2+} from intracellular storage sites (such as the endoplasmic reticulum or mitochondrion) or by opening plasmalemmal channels for the cation to enter the cell.[4] While both the α_1- and α_2-adrenoceptors increase cytoplasmic concentrations of nonsequestered or "free" Ca^{2+} which then mediates their intracellular effects, the two receptors are believed to do this by somewhat different mechanisms that are complex and imperfectly understood at present.[4] For example, in most but not all vascular smooth muscle preparations α_2-adrenoceptor effects appear to be more sensitive than α_1-adrenoceptors to suppression by Ca^{2+}-entry blockers, such as verapamil, that block depolarization dependent Ca^{2+} channels.[9] There also is evidence that the α_2-adrenoceptor pressor response, in contrast to the α_1-receptor response, requires maintenance by corticosteroids and is possibly affected by angiotensin II.[10] Respiratory acidosis shifts the pressor effect from a predominantly α_1- to an α_2-adrenoceptor response.[11] One clear difference generally observed between the two α-adrenoceptors is that the α_2 form suppresses adenylate cyclase activity and is more effectively reversed in its actions by α-adrenergic agonists than is the α_1-adrenoceptor.[3] In summary, in vascular smooth muscle the α_2-adrenoceptor appears to open depolarization dependent Ca^{2+} channels to allow the cation to enter the cells stimulating contraction, while concomitantly inhibiting adenylate cyclase activity. The α_1-adrenoceptor, while activating depolarization-dependent channels, also may open other forms of Ca^{2+} channels or mobilize some intracellular sequestered cation stores.

The complexity of the interactions among the adrenoceptors in vascular smooth muscle associated with regulating pressor responses provides a continuing opportunity for developing useful therapeutic agents to control hypertension, congestive heart failure, and other cardiovascular disorders. For some time, both agonists and antagonists which effectively discriminate between α- and β-adrenoceptors have been available. High degrees of selectivity for α-adrenergic antagonists at α_1- and α_2-adrenoceptors exist but discrimination among agonists for the two receptors is poor, with differences in concentration dependencies for activation being only about threefold. Moderate degrees of receptor specificity exist between β_1- and β_2-adrenergic selective agonists and antagonists. Since the two α-adrenoceptors respond differentially to Ca^{2+} entry blockers, acidosis, and β-adrenoceptor activity, as well as other factors, numerous possibilities exist for drug interactions to occur and to influence pressor responses for therapeutic good or ill.

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Opinion: Do We Need National Gun Control Laws?

Joseph F. Fennelly, M.D., Madison*

If we are to have a safe and peaceful world, we must act locally and think globally. We need to assist the passage of national gun control laws.

With winter upon us, we hardly are in the mood to reflect upon the unfinished business that surrounded the mass murder of men, women, and children occurring in southern California. This carnage, sandwiched between the celebration of ideas and ideals at the Democratic National Convention and the celebration of the physical accomplishments at the summer Olympics, is very unpleasant to dwell upon. However, without further apologies, I suggest that we look at some of these ideas as a guide to effective action.

New York's Governor Mario Cuomo in a speech eloquently elucidated the idea of family, mutuality, of the sharing of benefits and burdens. Who will and should come forth to share these burdens? Who shall assume leadership toward solving some of the problems concerning violence in our nation?

I suggest that the health profession lead the fight for strong national gun control. The physician: has a fund of knowledge about the mental aberrations that usually appear as violent behavior; is aware of the public health principles in epidemiology and ecology; and knows about the use of isolation and quarantine to prevent the spread of disease.

While we are engaging in the genuine debate as to whether people and/or guns kill, we should avoid the polarization of ideas and emphasize the continuum between the victim at the end of the barrel and the victim at the trigger of the handgun. The current national concern about controlling the drunken driver and reducing the harmful effects of the automobile by advocating the wearing of seat belts suggests that people and the inanimate kill. With this realization we are equipped to deal with the automobile in an effective fashion: we can create a model from which effective and just gun control laws can be passed. We would recognize that it is both the inanimate object (automobile/gun) and the human in "control" that must be subject to control.

The physician must demonstrate that the rationale for reducing the dangers inherent in the simple and easy access to handgun ownership could come through sensible isolation and quarantine measures. A substantial number of deaths can be avoided by simply removing the ability of a disturbed person to act out his aggressive feelings. Society then can protect the victim and the victimizer. The disturbed person frequently is emotionally relieved by the reassurance that society will prevent him from hurting himself through violence toward others.

I believe the public is ready for action. Shortly after John Lennon's death (performed by a mentally ill person using a handgun), I corresponded with the two Senators from New Jersey and the Congresswoman

*Dr. Fennelly is an internist. Correspondence may be addressed to Dr. Fennelly, 8 Shunpike Rd., Madison, NJ 07940.

from my district. Each favored stronger national gun control laws. These viewpoints reflected the overwhelming public opinion which is reinforced with each publicized episode of individual violence.

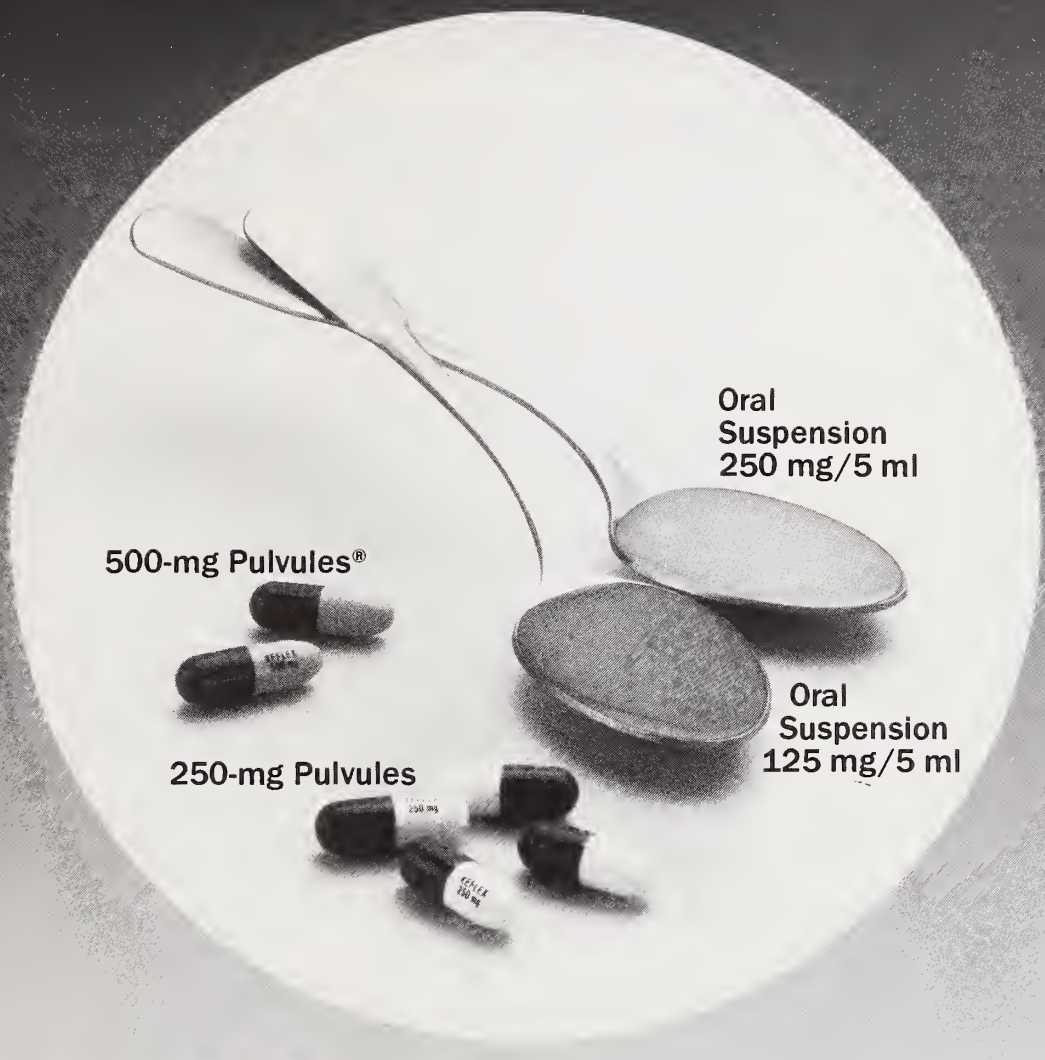
The evolving ethics of social responsibility particularly manifested through the growing woman's movement—the different voice addressing compassion and nurturing—suggest glimpses of the past. A turning point toward a more civilized society is thought to have occurred when the women of the nomadic tribes suggested to the male hunters that they not only hunt but "gather."

James Huberty, the late California victimizer, is quoted as having said, "I am going to hunt humans." Where then are the modern "gatherers?"

It is time that we redefined our social obligations as health professionals by becoming more active in the human potential movement. We can share and rediscover our responsibilities to each other in the belief that "no man is an island."

By assisting in the passage of sane national gun control laws, we can produce a "pebble in the pond" effect. If we are to have a safe and peaceful world, we must act locally and think globally.

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DOCTOR'S NOTEBOOK

Trustees' Minutes; UMDNJ Notes; MSNJ Auxiliary; AMNJ Report; Current Legislation; Physicians Seeking Location in New Jersey

Trustees' Minutes November 18, 1984

A regular meeting of the Board of Trustees was held on Sunday, November 18, 1984, at the Executive Offices in Lawrenceville. Detailed minutes are on file with the secretary of your county society. A summary of significant actions follows:

Right To Know Law . . . Was advised that Doctor Altman, Assistant Commissioner, Division of Epidemiology and Disease Control, New Jersey Department of Health, would prepare a summary encompassing the facts of the right to know law concerning hazardous substances in the workplace and environment that is applicable to physicians.

PRO . . . Approved the formation of a committee comprised of members of MSNJ to review screening criteria and the basis for these criteria, and to determine what mechanisms are in the PRO program to protect the patient from underutilization. Agreed that the development of a standard contract for hospitals dealing with the PRO should be a joint effort of the Executive Committees of MSNJ and the New Jersey Hospital Association. Also, voted to request that MSNJ be allowed representation as an observer of the PRO Board, pending consideration by the PRO for MSNJ to have official representation on their Board.

UMDNJ . . . Noted that plans are in the making to create a major health care complex by relocating the United Hospitals facility on the University's Newark campus, adjacent to University Hospital.

Council on Legislation . . .
1) Old Business . . .
a) A-27—Blood Donations . . . Voted to refer this bill back to the Council on Legislation for reconsideration; the bill provides that a person who makes a blood donation when he knows he is infected with a communicable disease shall be guilty of a fourth degree crime.
2) Current State Legislation . . . Approved the positions recommended by the Council on Legislation, with the exception of A-2276—PMS/Premenstrual Syndrome where the position of no action was changed to disapproved. (A list of the bills appears on page 69.)

Council on Public Health . . . Approved the following recommendation:

That MSNJ urge the Governor to find a solution to the problem of insufficient Medicaid reimbursement for pertussis and polio immunization, inasmuch as the present situation will result in children not receiving the benefit of immunization.

Committee on Annual Meeting . . . Approved the following topic for the general session at the Annual Meeting, "Appropriate Medical Care in the Last Year of Life."

Committee on Biomedical Ethics . . . Approved the following two recommendations:

That the Board of Trustees approve the *Guidelines for Supportive Care Plans.*

That the Board of Trustees transmit the *Guidelines* to the New Jersey Department of Health, the New Jersey State Board of Medical Examiners, and the New Jersey Health Care Facilities Association, with the request that they endorse them.

Special Committee on Long-Range Planning and Development . . . Approved the following four recommendations:

1) That resident physician applications for provisional membership be processed at the state level. (The interview portion of the credentialling process is to be completed at the county level.)

2) That simultaneously with the application to the state for provisional membership, an application for membership also is to be submitted to the county society.

3) That after satisfactory completion of the application at the state level, a resident physician shall be admitted as a provisional member for a period up to six months, with the proviso that within the six-month period he or she must become a member of the county society in order to reach full member status at the state level.

4) That county societies be urged to expedite the credentialling process.

Ad Hoc Committee on Women Membership . . . Approved the following three recommendations:

1) That no further effort or money be expended in the recruitment of graduate women physicians as a separate unit.

2) That all future recruitment of physicians, male or female, be initiated at the student and resident level through a special project effort similar to the proposed AMA program.

3) That the Ad Hoc Committee on Women Membership be disbanded.

JEMPAC . . .
1) Appointment of Board Member . . . Approved the following recommendation:

That the Board of Trustees approve the appointment of Dr. Rudolfo Pascual to the JEMPAC Board of Directors.

2) JEMPAC Liaisons . . . Approved the following recommendation:

That the Board of Trustees ask the executive committee of each county medical society to appoint one member from their society to serve as a liaison to JEMPAC.

Committee on Medical Defense and Insurance . . .

Tax Audit Insurance . . . Disapproved the following recommendation:

That MSNJ offer "Tax Right, Tax Audit Insurance," as presented by Bowdring & Company, Inc. as a membership benefit.

New Business . . .

1) AMA and Medical Inter-Insurance Exchange Activities . . .

a) Update on Preliminary Injunction/Complaint Against Implementation of New Medicare Laws . . . Noted that the U.S. District Court in southern Indiana did not grant the motion filed by the AMA, the Indiana State Medical Association, and several physicians, which sought a preliminary injunction against the October 1, 1984, implementation of the new Medicare Law, but granted limited relief to those physicians who were unable to obtain the complete Medicare information requested by their carriers.

b) PRO Contract . . . Noted that Dr. Todd mentioned a request for proposal has come out from HCFA for a group to become the validation agent for the PRO process nationwide.

c) Professional Liability Rates . . . Noted that MIIENJ would increase rates across the board, approximately 24.1 percent.

d) NJ Medical Malpractice Reinsurance Association . . . Noted that the Reinsurance Association, which no longer is writing insurance, faces a $42+ million deficit, about $35 million of which is attributable to physicians.

2) Physicians' Practice Costs Survey . . . Received as informative a communication from NORC, a social science research center at the University of Chicago, describing the Physicians' Practice Cost Study being conducted for the Health Care Finance Administration.

Correspondence . . . Noted that the Connecticut State Medical Society appreciated the crucial support extended to its new physician-owned professional liability insurance company by MIIENJ.

Daily Schedule
219th Annual Meeting

May 2-5, 1985
Americana Host Farm Resort
Lancaster, Pennsylvania

Thursday, May 2, 1985
9:00 A.M.—Registration Opens
9:00 A.M.—Message Center Opens
2:00 P.M.—House of Delegates
4:00 P.M.—Reference Committees (Three Reference Committee Meetings)

Friday, May 3, 1985
7:30 A.M.—Registration Opens
9:00 A.M.—House of Delegates (election)
9:00 A.M.—Message Center and Exhibits Open
12:00 NOON—Golden Merit Award Ceremony Followed by Reception
2:30 P.M.—Reference Committees (Three Reference Committee Meetings)
5:00 P.M.—JEMPAC Political Forum
5:45 P.M.—JEMPAC Wine and Cheese Reception

Saturday, May 4, 1985
8:00 A.M.—Registration Opens
8:30 A.M.—House of Delegates
9:00 A.M.—Message Center and Exhibits Open
1:30 P.M.—House of Delegates
6:30 P.M.—Inaugural Reception followed by Inaugural Dinner

Sunday, May 5, 1985
8:00 A.M.—Registration Opens
9:00 A.M.—Message Center and Exhibits Open
9:00 A.M.—Program of Major Interest to Physicians
12 NOON—Luncheons and Board of Trustees' Meeting

UMDNJ Notes

Stanley S. Bergen, Jr., M.D.
President

For UMDNJ, 1984 was a year in which sights were focused firmly on the future. The major events of the year centered on plans and initiatives designed to move New Jersey forward into a new era of health care and health sciences education.

During 1984, UMDNJ was developing new kinds of partnerships with public and private resources in the state in order to achieve its goals more quickly and efficiently.

In Newark, a world-class academic health center was taking shape as the result of partnerships forged between the University and other higher education units in Newark, between UMDNJ and private health care facilities and corporations, between the University and New Jersey physicians, and with the entire Newark community.

In central New Jersey, with voter approval of the $90 million Jobs, Science and Technology Bond Issue, UMDNJ struck a partnership as large as the state itself. The people of New Jersey have given UMDNJ and Rutgers University the task of building a Center for Advanced Biotechnology and Medicine (CABM) in Piscataway that will draw together the health sciences research resources of the two universities and create linkages with similar resources in the private sector. At the same time, UMDNJ will have the additional responsibility of translating the research advances made by CABM into better health care for New Jerseyans, a step to be accomplished through the University's close ties with Middlesex General-University Hospital in New Brunswick and with other private health care facilities in the region.

In southern New Jersey, the partnerships created to make medical education possible grew stronger in 1984 and prepared for expanded development in the new year. State funding assured continuation in eight southern New Jersey counties of the Area Health Education Center programs that bring together federal, state, county, and municipal resources to address the region's needs for health care and health care professionals.

New legislation made it possible for the Institute of Medical Re-

search, a nonprofit center for biomedical investigation, to relocate to the University's Camden campus. Almost before the $9 million Education and Research Building near Cooper Hospital/University Medical Center in Camden opened in mid-1984, South Jersey programs had outgrown the new facility. A report is expected in 1985 from a consulting panel of five distinguished educators and scientists who have been examining this area's medical education programs, including site visits in September, October, and November. Their recommendations could bring about major changes in the configuration of the education of some of our physicians.

As 1984 was drawing to a close, UMDNJ's Board of Trustees resolved to intensify planning for colocation with United Hospitals Medical Center of Newark, a project that reaffirmed the University's commitment to the people of Newark and to developing the finest possible health care system for New Jersey. Colocation would entail phasing out United 's obsolescent facilities, which are situated within six blocks of our Newark campus, and constructing a new wing on University Hospital to house the voluntary medical center's programs.

Colocation will reduce significantly the number of excess hospital beds in the Newark area. The overall plan, which will be overseen by an advisory committee of representatives of the boards of UMDNJ and United Hospitals as well as the business, professional, and public communities, also will look at options for making health services more convenient and accessible through ambulatory care satellite clinics and home health care.

Earlier in 1984, UMDNJ's University Hospital addressed those same issues in its strategic plan for program development including cancer treatment, newborn and child health services, and neurosciences and neurosurgery. A cooperative effort with United Hospitals Medical Center could permit broader and more rapid development, as well as unification of related and complementary programs that are supported by similar professional staff and equipment.

MSNJ Auxiliary

Grace Gellman
President

The Medical Society of New Jersey Auxiliary joined with the American Cancer Society and the American Lung Association of New Jersey to work on the Great American Smokeout dispensing materials for offices.

The 1985 National Cluster meeting will be held February 12 to 14, in Chicago. This meeting is offered by the AMA Auxiliary to encourage discussion of mutual concerns among the incoming state presidents and presidents-elect. It also informs these officers of National's future plans and programs as well as provide leadership training. I am happy to say that Mrs. Charles Moloney and the nominated president-elect will represent the MSNJ Auxiliary at that meeting.

The Impaired Physicians Program together with the Auxiliaries to the Medical Society of New Jersey and the New Jersey Association of Osteopathic Physicians and Surgeons will cosponsor a one-day seminar to be held March 24, 1985, Medical Society headquarters. The topic will be, "The Medical Family, Its Strengths, Its Weaknesses and Insuring Its Survival." Dr. M.O. Vincent will speak on "The Physician's Family—Strengths and Weaknesses" and "The Physician and The Physician's Family Survival and Solutions"; Dr. David I. Canavan will speak on the impaired physician; and Rev. Edward G. Reading's topic will be "The Impaired Physician's Family and Family Therapy." Also on the program is, "Special Stresses—Retirement and Malpractice Suits." We encourage you to attend this informative and educational seminar with your spouse.

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September 1984

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AMNJ Report

Robert S. Rigolosi, M.D.
President

On October 20, 1984, the Academy sponsored an outstanding symposium, "Potential Human and Ecologic Disasters," at the Town and Campus Restaurant in West Orange. Over 200 participants discussed various critical issues facing mankind and medicine today. This type of meeting is an example of the Academy's efforts at bringing crucial issues to the forefront which may not necessarily be of an entirely clinical nature. I commend Dr. Donald Louria for his efforts as program chairman.

During November we had two major symposia scheduled. On November 17, Drs. Robert Hobson and Abbott Krieger chaired "Medical and Surgical Management of Cerebrovascular Insufficiency" held at the New Jersey Medical School, Newark. The meeting was designed for family physicians, surgeons, internists, and neurologists interested in the care of patients with cerebrovascular insufficiency.

On November 28, the Academy presented "A Symposium on Controversies in Geriatrics" held at the Executive Offices. Dr. Marvin Kirschner chaired the meeting that identified specific medical and social problems of the aged. In addition, we discussed plans to determine who should be in charge of the elderly: a primary care physician or a specialist in geriatrics. Finally, we discussed whether or not geriatrics is a specialty of medicine.

The speaker for the Academy's November 7, First Wednesday presentation was Mr. William Toby, Regional Administrator for the NY HCFA office. Mr. Toby gave an excellent review of the new Medicare reimbursement regulations and entertained a number of pertinent questions. On December 5, Dr. David Canavan addressed "The Impaired Physician/The 'Myths' and the Reality."

The Annual Awards Dinner of the Academy will be held on Wednesday, May 29, 1985, at the Chanticler, Short Hills. A number of outstanding nominations presently are being reviewed by the Awards Committee and recipients will be announced by the Board of Trustees in the near future.

Current Legislation

The Board of Trustees of the Medical Society of New Jersey approved the recommended positions on the following bills of medical interest:

S-629-Bassano—Immuno-Augmentative Therapy (I.A.T.). S-1127-Costa—Immuno-Augmentative Therapy (I.A.T.). Permits the use of I.A.T. when prescribed by a licensed physician. No institution may prohibit its use. A statutory form of informed (consent) request is established and must be filed with the institution and the Department of Health. The Commissioner of Health is to report to the Governor annually about the number of cases and their status. **Disapproved, with Active Opposition if the bill moves,** there is no documented evidence that I.A.T. is effective in the treatment of any type of cancer and its use may cause delay in receiving the appropriate, proved treatment methods.

S-1854-Cardinale—Dental X-Rays. Requires any person x-raying the mouth or teeth of patients to shield the area, from the upper neck to mid-thigh, with a lead apron or other protective garment. **Approved.**

S-1890-Rand—Education and Research. Appropriates $6.2 million to move the Institute for Medical Research into UMDNJ-Camden. **No Action** (pending review of the Report of the Special Department of Higher Education Committee appointed to evaluate this project).

S-1906-Graves—Motor Vehicle Vision Examinations (same as A-2192). Provides that a licensed ophthalmic dispenser may certify successful completion of the required visual examination for an operator's license. **Disapproved, with Active Opposition if the bill moves,** because the motorists may feel they are receiving a quality eye examination when, in fact, the examination merely consists of an eye chart reading test and a test for peripheral vision and depth perception.

S-1920-O'Connor—No-Fault Medical Expense. Prohibits auto insurers from issuing policies to an insured who has elected a medical expense benefit deductible unless the insured supplies proof to the insurer that he is covered for medical expenses under an alternative health insurance plan. **No Action.**

S-2005-Codey—Youth Suicide. Establishes a youth suicide prevention demonstration program within the Department of Education. Guidelines established by the Department will be administered by local boards of education and community mental health service providers. **Conditional Approval,** provided the bill is amended to read "in cooperation with local psychiatric and mental health resources."

S-2018-Dorsey—Genetic Engineering of Microorganisms. Creates a 24-month ban on the release of genetically engineered microorganisms into the environment. Establishes a commission to study the problem and propose solutions. **Action Deferred,** pending further information from MSNJ's Council on Public Health, the New Jersey Health Science Group, and the Department of Health's Division of Epidemiology and Disease Control.

S-2019-Lynch—Dispensing of Contact Lenses. Creates the profession of contact lens dispensing and fitting for nonphysicians and nonoptometrists. Licensure and regulation would be through the Board of Examiners of Ophthalmic Dispensers and Ophthalmic Technicians. A prescription by a licensed optometrist or physician would be required. **Active Opposition,** to that portion of the bill referring to the fitting of contact lenses, because MSNJ does not feel it would be beneficial to the health of the consumer. Contact lenses improperly used or fitted may cause irreparable damage to the cornea. The fitting of contact lenses should be done by the prescribing ophthalmologist or optometrist.

S-2023-Cardinale—Automobile Insurance. Creates a study commission to ascertain whether no-fault insurance should be replaced by a system of compensation patterned after workmen's compensation. **No Action.**

S-2044-Lesniak—Mandatory Use of Seat Belts. To require that the driver and passengers in the front seat of an operating passenger automobile wear the safety seat beat provided. **Active Support.**

S-2051-Feldman—Medical Education. Appropriates $9.45 million to design an osteopathic medical school in Stratford. Also provides construction monies for classrooms and administrative offices. **Active Opposition,** because there is no need for the development of a separate osteopathic school for the training of medical students in the state of New Jersey and New Jersey is facing an oversupply of physicians.

S-2088-Cowan—Medical Education. Authorizes the State Board of Higher Education to contract with an out-of-state medical school to accept two to four minority students per class. Following licensure, the students must serve three years in a medically underserved area of New Jersey. **Disapproved,** the purpose of this bill best can be resolved by utilizing educational facilities within the state.

S-2098-Rand—Cancer Research. Expands the scope of research projects that may be conducted by the State Commission on Cancer. **Action Deferred,** pending further information from MSNJ's Committee on Cancer Control.

SJR-41-Lipman—Adolescent Pregnancy. Creates a commission to study adolescent pregnancy. There is no provision for physician representation. **Conditional Approval,** pending the inclusion of physician representation from the N.J. Obstetrical & Gynecological Society, the N.J. Chapter/American Academy of Pediatrics, and the N.J. Academy of Family Physicians.

A-1918-Miller—Damages in Personal Injury and Wrongful Death. Provides that collateral sources of payment shall be used to offset damages. Further provides structured payments be used at the request of either party if the future damages exceed $100,000. **Active Support.**

A-1919-Miller—Limitation of Personal Injury Damages. Provides a $100,000 cap on damages for pain and suffering to personal injury actions. **Active Support.**

A-1924-McEnroe—Nurse-Midwife. Requires the Commissioner of Health to establish a nurse-midwife prenatal demonstration project at East Orange General Hospital in accordance with the guidelines established by the Commissioner. **No Action.**

A-2001-Doria—Limited X-Ray Technologists. Provides for the licensing of limited x-ray technologists to perform podiatric studies. **Disapproved,** this legislation is inferior to **S-515** which, adequately, addresses the issue.

A-2106-Paterniti—Nursing Homes. Requires nursing homes with 100 beds

or more to dedicate 10 percent of bed capacity to indigent, 10 percent to complex care, and 10 percent for medical day care services. **Active Opposition,** this legislation fails to recognize the responsibility of the state of New Jersey concerning its indigent patients and further disrupts the management of institutions by creating quotas and rationing beds and services.

A-2122-Cooper—Seat Belts/School Buses. Establishes seating restraint and emergency exit requirements for school buses. **Active Support.**

A-2129-Walker—Infant Mortality. Creates an infant mortality prevention program in the Department of Health to provide obstetrical and prenatal services to women with high-risk pregnancies. Also provides postpartum followup services. Seven hospitals are designated by statute with three to be added by the Commissioner. Four million dollars is appropriated. **Action Deferred,** pending further information from MSNJ's Committee on Maternal and Child Care.

A-2140-Rooney—Juvenile Offenders. Provides that a judge may order a juvenile offender to be examined by a physician, optometrist, or audiologist. **Action Deferred,** pending further information from the NJ Chapter/American Academy of Pediatrics, the NJ Academy of Family Physicians, and the NJ Academy of Ophthalmology & Otolaryngology for report back to the Council at its next scheduled meeting.

A-2184-Muhler—Good Samaritan. Requires persons at the scene of accidents or emergencies to render reasonable assistance. **No Action.**

A-2192-Penn—Motor Vehicle Vision Examination (same as S-1906). Provides that a licensed ophthalmic dispenser may certify successful completion of the required visual examination for an operator's license. **Disapproved, with Active Opposition if the bill moves,** because the motorists may feel they are receiving a quality eye examination when, in fact, the examination merely consists of an eye chart reading test and a test for peripheral vision and depth perception.

A-2214-Bryant—Medical Research (same as S-1890). Appropriates $6.2 million to move the Institute for Medical Research into UMDNJ-Camden. **No Action,** (pending review of the Report of the Special Legislative Committee appointed to evaluate this project).

A-2276-Perun—PMS/Premenstrual Syndrome. Establishes a program of research at UMDNJ-New Brunswick to study the causes of premenstrual syndrome and develop effective methods for treating and preventing this condition. **No Action.**

A-2286-Otlowski—Suicide Prevention. Establishes an Advisory Council and pilot program in the Department of Human Services for teenage suicide prevention. Eighty thousand dollars has been appropriated. There is no requirement of physician participation of the Advisory Council. **Disapproved,** in favor of S-2005.

A-2293-Kalik—Osteopathic Education. Appropriates $9.45 million for the UMDNJ Osteopathic School in Stratford. **Active Opposition,** because there is no need for the development of a separate osteopathic school in the state of New Jersey and New Jersey is facing an oversupply of physicians.

A-2304-Brown—Mandatory Use of Seat Belts. To require that the driver and passengers in the front seat of an operating passenger automobile wear the safety seat belt provided. **Active Support.**

A-2406-Shusted—Hemodialysis Technician. Hemodialysis technicians would work under the supervision of physicians. This legislation would establish 1) guidelines for training and education; 2) guidelines for recognized testing and certification procedures; and 3) guidelines to define the role and responsiblities of the hemodialysis technician. **Action Deferred,** pending further information from John P. Capelli, M.D., Chairman, NJ Renal Physicians Association, Richard Goldstein, M.D., Commissioner of Health, for report back to the Council at its next meeting.

Physicians Seeking Location in New Jersey

The following physicians have written to the Executive Offices of MSNJ seeking information on possible opportunities for practice in New Jersey. The information listed below has been supplied by the physician. If you are interested in any further information concerning these physicians, we suggest you make inquiries directly to them.

ANESTHESIOLOGY—Howard Ang, M.D., 7-29 Hegeman Ave., #3-A, Brooklyn, NY 11212. Far Eastern University 1976. Group or partnership. Available.

CARDIOLOGY—John T. Cardone, M.D., 1035 Southern Artery, Apt. 707, Quincy, MA 02169. SUNY-Buffalo 1980. Board certified. Partnership or group. Available July 1985.

DERMATOLOGY—Catherine A. Nordby, M.D., 871 Beaconsfield, Grosse Pointe Park, MI 48230. St. Louis 1980. Board eligible. Specialty or multispecialty group. Available July 1985.

EMERGENCY MEDICINE—Gerard B. Martin, M.D., 871 Beaconsfield, Grosse Pointe Park, MI 48230. St. Louis 1980. Board eligible. Teaching hospital with emergency medicine residency or trauma center with research potential. Available July 1985.

FAMILY MEDICINE—Alena Bilek, M.D., 2600 Netherland Ave., Apt. 2808, Bronx, NY 10463. Charles (Czechoslovakia) 1970. Group or partnership. Available July 1985.

Cary A. Davidson, M.D., 100B Finderne Ave., Bridgewater, NJ 08807. SUNY-Upstate 1982. Board eligible. Rural or suburban practice, family practice, solo, group. Available July 1985.

Francis C. Imbarrato, M.D., 505 Hawthorne Ave., Williamsport, PA 17701. Guadalajara (Mexico) 1981. Board eligible. Solo, associate, partnership, group, HMO. Available July 1986.

GASTROENTEROLOGY—Ronald J. Cirillo, M.D., 7 Sandpiper Dr., Voorhees, NJ 08043. Guadalajara (Mexico) 1978. Also, internal medicine. Board eligible (IM). Any type practice. Available July 1985.

Steven M. Samuels, M.D., 4908 David Ct., Cincinnati, OH 45215. Louvain (Belgium) 1980. Also, internal medicine. Board certified (IM). Group or partnership. Available July 1985.

Eliot H. Zimbalist, M.D., 430 East 67 St., Apt. 12F, New York, NY 10021. Mt. Sinai 1980. Also, internal medicine. Board certified (IM). Group, partnership, multispecialty. Available July 1985.

HEMATOLOGY—Hoon Park, M.D., 112 W. 65 St., Apt. 3, Westmont, IL 60559. Kyung Hee (Korea) 1973. Board certified (IM). Also, internal medicine. Solo, group, partnership, institution. Available July 1985.

INTERNAL MEDICINE—Kurt N. Bausback, M.D., 415 S. Van Pelt St., Apt. D-4, Philadelphia, PA 19146. Stanford 1982. Board eligible. Group, multispecialty, hospital, emergency center. Available July 1985.

John T. Cardone, M.D., 1035 Southern Artery, Apt. 707, Quincy, MA 02169. SUNY-Buffalo 1980. Board certified. Also, cardiology. Partnership or group.

Ronald J. Cirillo, M.D., 7 Sandpiper Dr., Voorhees, NJ 08043. Guadalajara (Mexico) 1978. Subspecialty, gastroenterology. Board eligible. Any type practice. Available July 1985.

Kenneth Russell Feuer, M.D., 3120 Parkway, Cheverly, MD 20785. Baylor 1980. Also, gastroenterology. Board certified. Available July 1985.

Cory Krueger, M.D., 2301 Woodward St., Apt. C-12, Philadelphia, PA 19115. Rutgers 1982. Board eligible. Group or partnership. Available July 1985.

Phillip A. Lecso, M.D., 5138 Regency Dr., Toledo, OH 43615. Medical College of Ohio 1982. Board eligible. Single, multispecialty group, partnership. Available July 1985.

Dominic Mazzocchi, M.D., 1231 E. 89th St., Brooklyn, NY 11236. Puerto Rico 1981. Board eligible. Group or partnership. Available January 1985.

Richard Narvaez, M.D., 516 Berkley Rd., Narberth, PA 19072. Temple 1982. Group, partnership, HMO, solo. Available July 1985.

Hoon Park, M.D., 112 W. 65 St., Apt. 3, Westmont, IL 60559. Kyung Hee (Korea) 1973. Board certified. Also, hematology. Solo, group, partnership, institution. Available July 1985.

Steven M. Samuels, M.D., 4908 David Ct., Cincinnati, OH 45215. Louvain (Belgium) 1980. Subspecialty, gastroenterology. Board certified. Group or partnership. Available July 1985.

Jerrold P. Schwartz, M.D., 69 Gold St., Apt. 12-C, New York, NY 10038. Dijon (France) 1982. Group, clinic, hospital-based, long-term care. Available July 1985.

Lewis B. Zimet, M.D., 4313 Carambola Circle S., Coconut Creek, FL 33066. Far Eastern (Philippines) 1981. Board eligible. Solo, group, partnership, industrial, hospital-based. Available.

OBSTETRICS/GYNECOLOGY—Nissim Contente, M.D., 7300 Cedar Post Rd., Apt. 10E, Liverpool, NY. Guadalajara (Mexico) 1979. Board eligible. Group or partnership. Available July 1985.

Amnon Fein, M.D., 223 East Ave., Apt. 6B, Syracuse, NY 13224. Guadalajara (Mexico) 1980. Group or partnership. Available July 1985.

OTOLARYNGOLOGY—Leonid E. Super, M.D., 1910 59 St., Brooklyn, NY 11204. Chernovcy (USSR) 1952. Group, partnership, HMO. Available.

OPHTHALMOLOGY—George R. Coar, M.D., 3245 Beechwood Blvd., Apt. C-11, Pittsburgh, PA. Jefferson 1981. Board eligible. Group, partnership, solo. Available July 1985.

Peter J. Famiglietti, M.D., Box 76, R.D. #5, Danville, PA 17821. Connecticut 1981. Board eligible. Group or partnership. Available July 1985.

PATHOLOGY—Joseph W. Depenbusch, M.D., University of Wisconsin Hospital, 600 Highland Ave., Madison, WI 53792. Iowa 1981. Board eligible. Available July 1985.

PEDIATRICS—Noah Barysh, M.D., 603A Old Nassau Rd., Jamesburg, NJ 08831. Chicago 1933. Board certified. Part time, 15 hrs/wk. Available.

Suhaila Siddiqi Hussain, M.D., 104 Running Brook Rd. East, Ewing, NJ 08638. Baghdad (Iraq) 1979. Board eligible. Group, partnership, solo. Available.

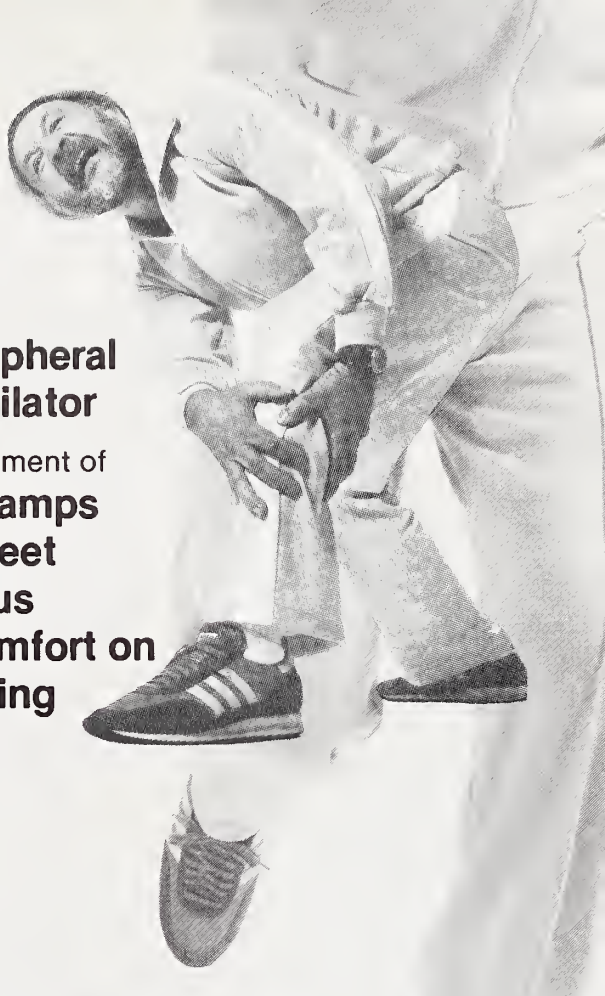
Nellie Novak, M.D., 1015 West Cherry Hill Apts., Cherry Hill, NJ 08002. Sverdlovsk (USSR) 1974. Board eligible. Group, partnership, HMO. Available July 1985.

RADIOLOGY—Martin J. Lachman, M.D., 4040 Ford Rd., Philadelphia, PA 19131. Temple 1966. Board certified. Group, partnership, hospital. Available.

SURGERY—Victor P. Bruno, M.D., 702 Fordham Rd., Bala Cynwyd, PA 19004. Georgetown 1978. Board eligible. Group or partnership. Available May 1986.

UROLOGY—Bharat R. Shah, M.D., 2610 Michaels Dr., Temple, TX 76502. BJ Medical (India) 1968. Board eligible. Solo, group, partnership, multispecialty, academic. Available.

Richard S.D. Tushman, M.D., 519 Vantage Pl., Richmond, VA 23236. Cornell 1980. Board eligible. Available July 1985.



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MEDICAL SOCIETY OF NEW JERSEY
THURSDAY, MAY 2, TO SUNDAY, MAY 5, 1985

THE FOLLOWING ARE ALL-INCLUSIVE PACKAGE PLANS BASED ON MODIFIED AMERICAN PLAN, INCLUDING DINNER AND BREAKFAST DAILY STARTING WITH DINNER ON THE DAY OF ARRIVAL, THE SATURDAY NIGHT BANQUET, LIVE CABARET SHOWS EACH EVENING FEATURING A DIFFERENT SHOW EVERY NIGHT, STATE SALES TAX, AND ALL GRATUITIES COVERING BELLMEN FOR IN/OUT LUGGAGE SERVICE, CHAMBERMAIDS, AND ALL MEAL SERVICE AS OUTLINED:

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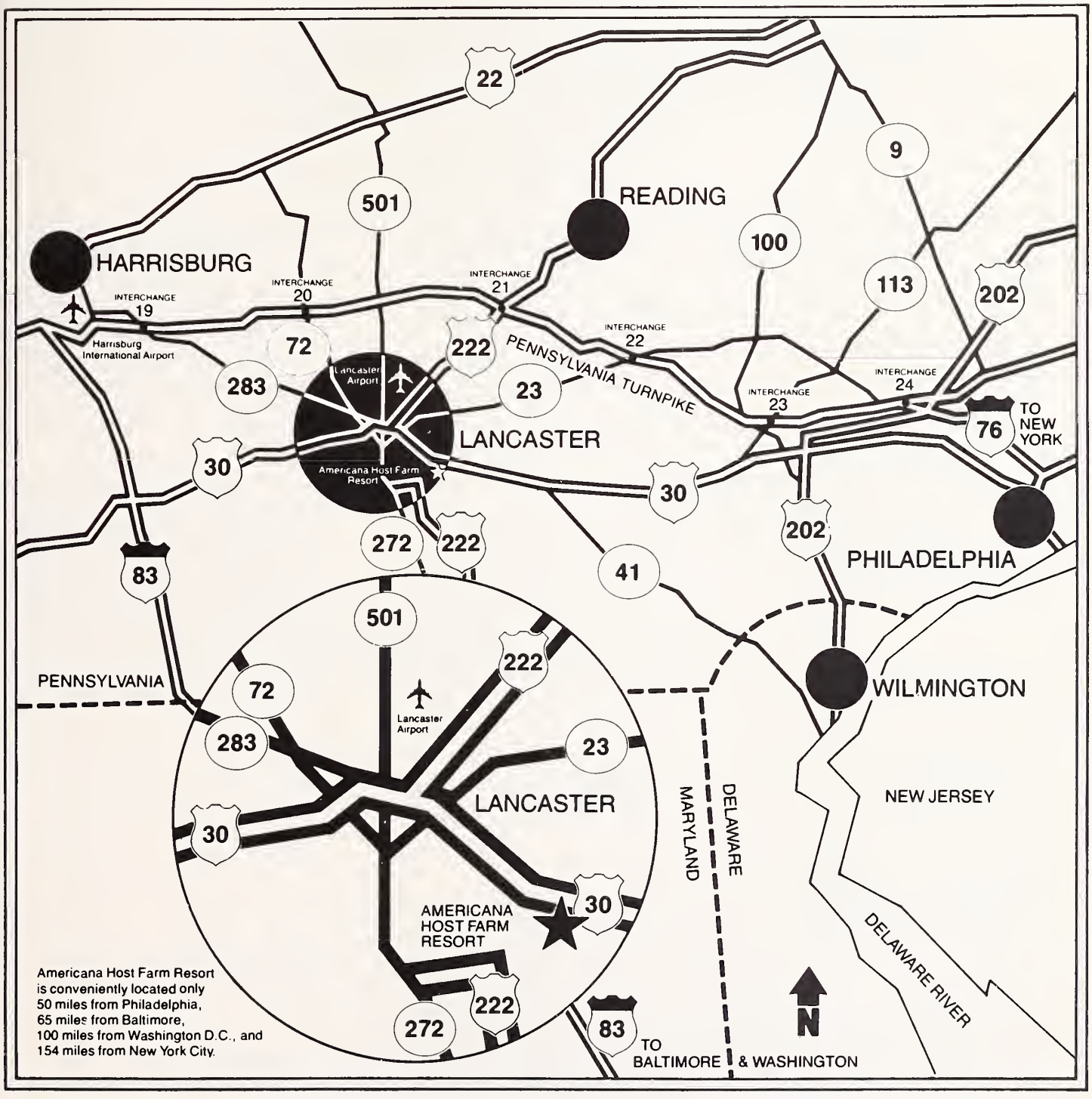
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THE MEDICAL FAMILY
ITS STRENGTHS, ITS WEAKNESSES AND INSURING ITS SURVIVAL

Sunday, March 24, 1985
9:30 a.m.

The Impaired Physicians Program and the Auxiliaries to the Medical Society of New Jersey and the New Jersey Association of Osteopathic Physicians and Surgeons invites you and your spouse to attend this day of enlightenment. Topics to be addressed include:

THE PHYSICIANS FAMILY—STRENGTHS AND WEAKNESSES

THE IMPAIRED PHYSICIAN

THE IMPAIRED PHYSICIAN'S FAMILY AND FAMILY THERAPY

THE EMOTIONAL IMPACT OF A MALPRACTICE SUIT ON THE PHYSICIAN AND THE PHYSICIAN'S FAMILY

GEARING UP FOR RETIREMENT

THE PHYSICIAN AND THE PHYSICIAN'S FAMILY—SURVIVAL AND SOLUTIONS

GUEST SPEAKERS
M.O. Vincent, M.D., Ontario, Canada
Sara Charles, M.D., University of Illinois
Frank C. Snope, M.D., Piscataway, New Jersey

Application has been made for CME Credit Hours!

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PLEASE COMPLETE AND RETURN YOUR REGISTRATION FORM AS SOON AS POSSIBLE. SPACE IS LIMITED!!!

Return to: **Impaired Physicians Program**
c/o Medical Society of New Jersey
2 Princess Road
Lawrenceville, New Jersey 08648

CME CALENDAR

The following is a list of continuing medical education courses for the next two months. Contact the sponsoring organization for further information.

This list is compiled through the cooperation of the Committee on Medical Education of the Medical Society of New Jersey, the Academy of Medicine of New Jersey, the New Jersey Chapter of the American Academy of Family Physicians, and the Office of Continuing Medical Education of the UMDNJ. For information on accreditation, please contact the sponsoring organization(s), indicated by italics—last line of each item.

ANESTHESIOLOGY

Feb.

9 **Clinical Anesthesia**
8 A.M.-3 P.M.—100 Bergen St., Newark
(UMDNJ and AMNJ)

CARDIOLOGY

Feb.

13 **Thrombolytic Therapy: A New Strategy in the Treatment of Acute MI**
1-2:30 P.M.—Christ Hospital, Jersey City
(Christ Hospital and AMNJ)

19 **Angina after Bypass Surgery**
12 noon—St. Mary's Hospital, Orange
(AMNJ)

MEDICINE

Feb.

1 **Renal Conferences in Nephrology**
15 4-5 P.M.—UMDNJ-Rutgers Medical School, Med. Education Bldg., Rm. 393
(Nephrology Society of NJ and AMNJ)

6 **Medicine Morbidity and Mortality Conference**
8-9 A.M.—Rutgers Medical School, Medical Education Bldg., New Brunswick
(UMDNJ and AMNJ)

6 **Medical Grand Rounds**
13 12 noon-1 P.M.—Rutgers Medical
20 School, Medical Education Bldg.,
27 New Brunswick
(UMDNJ and AMNJ)

6 **Endocrine Conferences**
13 3:30-5 P.M.—Rotates between
20 Newark Beth Israel Medical Center,
27 University Hospital, United Hospitals Medical Center, Newark, and VA Medical Center, Orange
(Endocrinology Section, AMNJ)

6 **Internal Medicine Review Course**
13 3-6 P.M.—Overlook Hospital,
20 Summit
27 *(Overlook Hospital and AMNJ)*

7 **Immunoregulation: Basic**
14 **Concepts and Applications**
21 4-6 P.M.—Institute for Medical
28 Research, Copewood St., Camden
(Institute for Medical Research and AMNJ)

12 **Virology in Dermatology**
8-10 P.M.—Schering Corporation, Kenilworth
(AMNJ)

20 **Rutgers Dermatological Conference**
6-9 P.M.—U.S. Hwy. 1 and Rt. 18, New Brunswick
(UMDNJ)

21 **The Thyroid—Its Ups and Downs**
5-7:30 P.M.—Somerset Medical Center, Somerville
(Somerset Medical Center and AMNJ)

28 **New Treatment of Modalities and Implications of Diabetes**
11 A.M.—St. Joseph's Hospital and Medical Center, Paterson
(AMNJ)

28 **Visiting Professorship Program**
1:30-5 P.M.—Saint Barnabas Medical Center, Livingston
(Saint Barnabas Medical Center and AMNJ)

Mar.

1 **Renal Conferences in Nephrology**
15 4-5 P.M.—Rutgers Medical School, Rm. 393, Medical Education Bldg.
(Nephrology Society of NJ and AMNJ)

6 **Hyperthyroidism**
1:30 P.M.—Essex County Hospital Center, Cedar Grove
(AMNJ)

6 **Statewide Tumor Board Conference and Dinner**
5:30 P.M.—MSNJ, Two Princess Rd., Lawrenceville
(Oncology Society of NJ and AMNJ)

6 **Endocrine Conferences**
13 3:30-5 P.M.—Rotates between Newark Beth Israel Medical Center, University Hospital, and United Hospitals Medical Center, Newark, and VA Medical Center, Orange
(Endocrinology Section, AMNJ)

6 **Internal Medicine Review Course**
13 3-6 P.M.—Overlook Hospital,
20 Summit
27 *(AMNJ)*

6 **Medicine Morbidity and Mortality Conference**
8-9 A.M.—Rutgers Medical School, Medical Education Bldg., New Brunswick
(UMDNJ and AMNJ)

6 **Medical Grand Rounds**
13 12 noon-1 P.M.—Rutgers Medical
20 School, Medical Education Bldg.,
27 New Brunswick
(UMDNJ and AMNJ)

7 **Distinguished Lecture Series**
14 11 A.M.-12 noon—St. Joseph's Hospital and Medical Center, Paterson
(St. Joseph's Hospital and Medical Center and AMNJ)

7 **Immunoregulation: Basic**
14 **Concepts and Applications**
21 4-6 P.M.—Institute for Medical
28 Research, Copewood St., Camden
(Institute for Medical Research and AMNJ)

12 **New Forms of Therapy for Cutaneous Ulcers**
8-10 P.M.—Schering Corporation, Kenilworth
(NJ Dermatological Society and AMNJ)

13 **Annual Convention**
14 Harrah's Trump Plaza,
15 Atlantic City
16 *(NJ Academy of Family Physicians)*

19 **Workup and Treatment of the Primary Cancer Patient**
12 noon—St. Mary's Hospital, Orange
(AMNJ)

20 **Potassium Homeostasis**
1-2:30 P.M.—VA Medical Center, Lyons
(VA Medical Center and AMNJ)

20 **Dermatologic Conferences**
6-9 P.M.—Rutgers Community Health Plan, U.S. Hwy. 1 & Rt. 18, New Brunswick
(UMDNJ)

28 **Update on Superficial Fungal Infections**
11 A.M.—St. Joseph's Hospital and Medical Center, Paterson
(AMNJ)

NEUROLOGY/PSYCHIATRY

Feb.

1 **On Idealization**
8:30-10:30 P.M.—The Atrium West, West Orange
(NJ Psychiatric Association and AMNJ)

4 **Mother-Daughter Fusion**
8:15-10:30 P.M.—9 Marquette Road, Upper Montclair
(Essex Psychiatric Seminar and AMNJ)

6 **Sleep Apnea**
1:30 P.M.—Essex County Hospital Center, Cedar Grove
(AMNJ)

7 **Diagnosis and Management of Migraine**
11 A.M.—St. Joseph's Hospital and

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SEE PAGES 74-78

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7 **Case Seminars**
21 8-10 P.M.—310 Harding Drive, South Orange
(Advanced Psychiatric Study Group and AMNJ)

18 **Lecture Series**
8:30-10:30 P.M.—301 Broad Ave., Englewood
(NJ Psychoanalytic Society and AMNJ)

21 **Coordination Psychiatric Treatment in the Hospital and the Community**
3 P.M.—Ancora Psychiatric Hospital, Hammonton
(AMNJ)

28 **Third Annual Conference on Emergency Psychiatry**
Three days—Atlantic City
(O'Neill Lynch Associates, Wayne, PA)

Mar.

4 **Another Affair in a Young Marriage**
8:15-10:30 P.M.—543 Park Street, Upper Montclair
(Essex Psychiatric Seminar and AMNJ)

7 **Case Seminars**
21 8-10 P.M.—310 Harding Drive, South Orange
(Advanced Psychiatric Study Group and AMNJ)

18 **Family Therapy with Adolescents**
1-4 P.M.—Fair Oaks Hospital, Summit
(Fair Oaks Hospital and AMNJ)

18 **Lecture Series**
8:30-10:30 P.M.—301 Broad Ave., Englewood
(NJ Psychoanalytic Society and AMNJ)

21 **Neuro-ophthalmology, Multiple Sclerosis, and Nutritional Deficiencies**
2 P.M.—John E. Runnells Hospital, Berkeley Heights
(AMNJ)

21 **Psychiatric Medical and Physical Aspects of Drug and Alcohol Abuse**
3 P.M.—Ancora Psychiatric Hospital, Hammonton
(AMNJ)

PEDIATRICS

Feb.

8 **Controversies in Pediatric Nutrition**
8-9:30 A.M.—Overlook Hospital, Summit
(Overlook Hospital and AMNJ)

Mar.

8 **Pediatric Emergency Care**
8 A.M.-12 noon—Overlook Hospital, Summit
(Overlook Hospital and AMNJ)

RADIOLOGY

Feb.

21 **Radiology Meeting**
7:30 P.M.—Saint Barnabas Medical Center, Livingston
(Radiological Society of NJ and Diagnostic Radiology Section, AMNJ)

Mar.

20 **Dinner Meeting**
6:30-9:30 P.M.—The Manor, West Orange
(Radiotherapy Section, AMNJ)

21 **NMR: A Bright Future**
5-7:30 P.M.—Somerset Medical Center
(Somerset Medical Center and AMNJ)

21 **Radiology Meeting**
7:30 P.M.—Saint Barnabas Medical Center, Livingston
(Radiological Society of NJ and AMNJ)

23 **Obstetrical and Perinatal Ultrasound**
8:30-4:30 P.M.—The Sheraton Inn, Newark Airport
(NJ Institute of Ultrasound in Medicine, Radiological Society of NJ, and AMNJ)

26 **High Field NMR Imaging**
8-10 P.M.—Englewood Club, Englewood
(Englewood Surgical Society and AMNJ)

28 **Visiting Professorship Program**
1:30-5 P.M.—Saint Barnabas Medical Center, Livingston
(Saint Barnabas Medical Center and AMNJ)

SURGERY

Feb.

12 **Surgical Grand Rounds**
26 7-9 A.M.—Hackensck Medical Center
(Hackensack Medical Center and AMNJ)

26 **Venous Disease and Venous Surgery**
8-10 P.M.—Englewood Club, Englewood
(Englewood Surgical Society and AMNJ)

Mar.

6 **Surgical Treatment of Morbid Obesity**
1 P.M.—Christ Hospital, Jersey City
(AMNJ)

12 **Surgical Grand Rounds**
19 7-9 A.M.—Hackensack Medical Center
(Hackensack Medical Center and AMNJ)

13 **Dinner Meeting**
6:30 P.M.—The Manor, West Orange
(NJ Society of Colon and Rectal Surgeons and AMNJ)

SURGICAL SPECIALTIES

Feb.

7 **Vascular Surgical Rounds**
14 4-5 P.M.—Medical Education Bldg.,
21 Rm. 593, New Brunswick
28 *(UMDNJ)*

Mar.

1 **Vascular Surgical Rounds**
8 4-5 P.M.—Medical Education Bldg.,
15 Rm. 593, New Brunswick
22 *(UMDNJ)*
29

MISCELLANEOUS

Feb.

12 **Malpractice**
12 noon—West Jersey Hospital, Camden
(AMNJ)

Medical Society of New Jersey 1985 Annual Meeting

The Medical Society of New Jersey will be conducting its 219th Annual Meeting, May 2 through May 5, 1985, at the Americana Host Farm Resort, in Lancaster, Pennsylvania.

You can plan your arrival for Thursday, May 2nd with a Sunday, May 5th departure.

There will be 500 rooms available at Host Farm Resort and an additional 100 rooms available in the immediate area.

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CARDIOLOGY UPDATE. . .

IS DESIGNED FOR THE PHYSICIAN AND PROVIDES AN INTENSIVE SURVEY OF THE CURRENT STATUS OF CLINICAL CARDIOLOGY. . .

WEDNESDAY, FEBRUARY 6, 1985

PACEMAKERS

MODERATOR: SCOTT R. SPIELMAN, M.D.

3:00 CASE PRESENTATION — *Bruno Manno, M.D.*

3:30 INDICATIONS, ADVANTAGES OF PHYSIOLOGIC PACEMAKERS (DDD PACEMAKERS) — *Allan M. Greenspan, M.D.*

4:00 ARE OTHER THAN THE UNIVERSAL DDD PACING MODES OBSOLETE? — *Scott R. Spielman, M.D.*

4:30 TREATMENT OF SUPRAVENTRICULAR TACHYCARDIA USING IMPLANTED ANTITACHYCARDIA PACEMAKERS — *Leonard N. Horowitz, M.D.*

5:00 TREATMENT OF VENTRICULAR TACHYCARDIA USING IMPLANTED ANTITACHYCARDIA PACEMAKERS: EFFICACY AND LIMITATIONS — *Allan M. Greenspan, M.D.*

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LETTERS TO THE EDITOR

Influenza Vaccine

Influenza Vaccine

August 15, 1984

Dear Doctor Krosnick:

I read the article on the effect of influenza vaccine on the hepatic cytochrome P450 enzyme system with interest, but found that there were many questions that remained unsolved in the case presented (*J Med Soc NJ* 81:573-574, 1984): 1) What were the digoxin levels on admission? 2) Was there a CAT scan of the brain? 3) Was the patient fibrillating before the illness? Could uncontrolled fibrillation have caused his problems? Could he have embolized? 4) What was the status of carotids? Could he have had a TIA?

I am certain that these issues must have been settled during the patient's hospital stay but feel that the article should have answered these questions.

I always enjoy reading *The Journal* and hope my questions will be received in the constructive spirit in which they are offered.

(signed) Joseph A. Caltabiano, M.D.

October 5, 1984

Dear Doctor Krosnick:

Dr. Caltabiano raises a number of pertinent questions. As stated in the case presentation, there are many causes of confusion and lethargy in the frail elderly. Any type of stress including urinary tract infection, fecal impaction, dehydration, viral syndromes, or even a change in environment may cause decompensation in a person with minimal functional reserve. For this reason, it often is difficult to pinpoint the cause of decompensation with certainty.

To answer the specific questions Dr. Caltabiano raises:

1) A serum digoxin level done three days postadmission was 0.5 mg/dl. A subsequent level was not drawn during the course of his acute illness.

2) A CAT scan of the brain was not obtained.

3) He was in atrial fibrillation at the time of admission to our facility. Over the next five days his pulse varied between 56 and 88 (based on daily nursing notes.) An EKG done at a later date demonstrated sinus bradycardia. There is a strong possibility this patient had sick sinus syndrome with paroxysmal atrial fibrillation. This patient would be at increased risk for an embolism.

4) There is no mention of carotid bruit in the initial physical examination. The manifestations of the illness were nonspecific, consisting of an overall decline in functional capacity. The patient became lethargic, nonambulatory, and incontinent of both stool and urine. However, he improved gradually over the ensuing week. Although no focal neurologic findings were documented at any time during the acute illness, it is possible that the illness may be explained by a RIND in the distribution of the posterior circulation (although unlikely without the presence of other neurologic findings.)

I cannot conclusively prove that an elevated serum nordiazepam level was responsible for the deterioration in his condition. It merely is a speculation based on three facts: 1) There were no changes in medication up to the time of vaccination. 2) Other readily identifiable systemic diseases were excluded. 3) The effect of influenza vaccine on the cytochrome system is known.

The purpose of the case report was to highlight the interaction of influenza vaccine with many commonly used medications and emphasize the need to adjust medical regimens prior to vaccination when indicated.

(signed) Robert B. Solomon, M.D.

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The Breast; Conversations in Medicine; Hematology: Principles and Procedures; Immunology of Clinical and Experimental Diabetes; Pulmonary Physiology; Operative Perinatology

The Breast: An Atlas of Reconstruction

Wallace H.J. Chang, M.D., and Judith J. Petry, M.D., (eds). Baltimore, MD, Williams & Wilkins, 1984. Pp. 434. Illustrated. ($77)

Doctors Chang and Petry have assembled an excellent team of expert plastic surgeons and created a magnificent atlas of breast reconstruction.

The text provides definitive sketches and clear-cut descriptions of a variety of prevalent procedures as well as several beautiful reproductions of mammary masterpieces by famous artists.

Although family practitioners, internists, and gynecologists, when consulted occasionally by their patients who are candidates for breast surgery, may have a brief interest in the graphic descriptions of these reconstructive procedures, this book really is practical only for plastic surgeons in training or in practice, interested in altering and/or improving their techniques as well as providing their patients with a better comprehension of contemplated or anticipated surgery.

This skillfully created book represents yet another example of the growing and sometimes insidious power of ubiquitous consumerism, in this particular case stressing, if not commercializing, the female breast and influencing medical management of breast cancer. Let us hope and pray that better chemotherapy will justify the current and popular approach.

Jerome Abrams, M.D.

Conversations in Medicine

Allen B. Weisse, M.D. New York, NY, New York University Press, 1984.

When Plato recorded the dialogues of Socrates, and Boswell jotted down every saying of Johnson, an early form of living biography was started. But it was not until the recent perfection of recording devices and tapes that the practice of oral history could become an invaluable reality. Originating at Columbia 40 years ago with Franklin D. Roosevelt as the first subject, the program now has become so widespread that few personalities of major stature have been able to avoid the importunities of the would-be biographer.

However, relatively few of those selected to date have been men of medicine or have been studied with the zeal and understanding which characterize the present writer. In his interviews with 16 of the more prominent figures of the profession, Dr. Weisse has provided us with a permanent record of the current medical scene—one which is bound to become increasingly useful with the passage of time. It is sad to note that two of the men interviewed already have left us. How fortunate we are to have their very words and thoughts about their own contributions, colleagues, and the future of our profession. What would we not give for similar reminiscences from Sir William Osler or other greats of previous generations?

The author is to be congratulated on this very readable book which I can recommend most heartily to all students of contemporary medical history and its most important exponents.

Morris H. Saffron, M.D.

Hematology: Principles and Procedures

Barbara A. Brown, B.A. Philadelphia, PA, Lea and Febiger, 1984. Pp. 405. Illustrated. ($26.50)

This attractive hardcover, firmly bound book has been written by one who knows hematology and knows how to teach. She is a MT(ASCP) and has a Master's degree.

The book is comprised of 405 pages and 202 illustrations (5 in color). There are seven major chapter headings as follows: basic laboratory techniques, routine hematology procedures, hematopoiesis, special hematology procedures, coagulation, diseases, and automation.

I believe the author is too modest in her opening sentence of the first chapter in which she states "Hematology is defined as the study of blood and today is concerned primarily with the study of formed elements of the blood." She then has an 80-page chapter on the methods of measuring the various coagulation factors and then 10 pages on coagulation disorders.

This is an excellent basic book and is recommended by the author for beginning students in medical technology. I would broaden this to include second-year medical students, first-year residents in internal medicine, and first-year residents in clinical pathology. A thorough knowledge of the contents of the book would prepare the technologists and young physicians to properly use the larger, much more expensive, and more encyclopedic reference books on hematology. This book is very current: it even includes the Fletcher factor in the coagulation system and her discussion of von Willebrand's disease is a delight. The index is six pages and very complete. The many illustrations are appropriate and clearly printed.

Hugh F. Luddecke, M.D.

Immunology of Clinical and Experimental Diabetes

Sudhir Gupta, M.D., (ed). New York, NY, Plenum Medical Book Company, 1984. Pp. 426. Illustrated. ($50)

This volume is a comprehensive review of modern diabetes immunology and presents current trends and research findings. National and international leaders from a variety of major medical centers contribute chapters covering topics including the structure

and function of insulin, animal models of human type I diabetes, genetic control of the immune response to insulin, mechanisms of insulin resistance, virus and insulin-dependent diabetes mellitus, and autoimmunity. The transplantation of pancreas and islets is reviewed in detail. Also included is a chapter concerning the pathogenesis, diagnosis, and management of insulin hypersensitivity.

The book is divided into two major sections, experimental diabetes and clinical diabetes, with chapters covering subtopics in each section. Each chapter starts with an introduction which states objectives to be covered and reviews standard definitions. Furthermore, an excellent list of references appears at the ending of each chapter.

Even though the book is technical in nature, it is written clearly and concisely. The multiple authors have followed a similar format and the volume is tightly edited.

This book is recommended for both the basic scientist and clinician who desire an indepth knowledge of genetic, viral, and immunological aspects of experimental and human diabetes.

Michael A. Schmitt, M.D.
New Jersey Department of Health

Pulmonary Physiology in Clinical Medicine

Gennaro M. Tisi, M.D. Baltimore, MD, Williams & Wilkins Company, 1983. Pp. 287.

This is the second edition of a text "which bridges the gap between basic principles and clinical application." The style is concise and consistent and this can be attributed to the single authorship.

The book is divided into four sections. The first section, 54 pages in length, discusses the clinical approach to patients and contains an initial 28-page chapter on pulmonary physiology. The first 21 pages are well illustrated and devoted to mechanics but only 3 pages are allowed for O_2 and CO_2 transport. Because of this limited discussion, the physiological implications of shifts in the O_2 dissociation curve and Haldane effect are omitted. Also in the next chapter on clinical evaluation cyanosis is appropriately dismissed as being an important indicator of hypoxemia because of its insensitivity. An opportunity to completely discard its use in determining the adequacy or inadequacy of arterial oxygenation is missed, however, in using only an individual with a normal hemoglobin concentration as an example in the calculation of the amount of reduced hemoglobin present in the mixed capillary blood.

The next section begins with a concise, well-written introduction to clinical spirometry followed by a similarly short discussion of arterial blood gases and pH, omitting, however, the technical aspects of measurement which were included for spirometry. Finally, this section concludes with miscellaneous tests including body plethysmography, diffusing capacity, and polysomnography while limiting discussion of CO_2 response to the ventilatory parameter not mentioning $P_{0.1}$ and inspiratory flow rates. Also a discussion of exercise testing in the evaluation of dyspnea and pulmonary function is omitted. For this section as with others, classic references are given.

The final chapter in this section on preoperative evaluation of pulmonary function is an authoritative and complete review. The references again are classic and obviously, by the number given, reflect the author's interest in this subject.

Section three is devoted to the use of the pulmonary function laboratory as a guide to diagnosis of common, if not generic, pulmonary diseases. The discussion on asthma, particularly pathophysiological aspects, is not current—the most recent reference being 1979—and makes no mention of leukotrienes. The discussion of occupational asthma is too brief and is as long as that for nasal polyps.

The final section has the purpose of illustrating the use of the pulmonary laboratory as a guide to therapy and is potentially the most exciting conceptually and therefore the most disappointing when it fails to mention the simplest laboratory techniques to make functional correlations. The use of the peak flow meter in the therapy of asthma is not discussed. In contrast to this universally appreciated clinical tool, total endorsement of the controversial techniques of incentive spirometry is not warranted. Moreover, the meager noncritical description of intermittent mandatory ventilation ignores the potential shortcomings of allowing fatiguing energy expenditure with noneffective respiratory muscle attempts at breathing to go on with little confirmation from the literature of the concept of disuse atrophy or the imagined benefit of this form of "exercise training" for the respiratory muscles. Even with weaning, the use of a respirometer, stopwatch, or force meter is not discussed at all.

This book does not achieve its stated goal and unfortunately cannot be recommended as a personal choice for the pre- or postgraduate student. However, because of the attributes mentioned, it can have a place in a departmental library.

Monroe S. Karetzky, M.D.

Operative Perinatology: Invasive Obstetric Techniques

Leslie Iffy, M.D., and David Charles, M.D., (eds). New York, NY, Macmillan Publishing Co., 1984. Pp. 2,084. Illustrated. ($110)

Utilizing a somewhat broad definition of "operative," the editors of this multiauthored text emerge with a very comprehensive reference source of perinatology.

It is heartening to know that there is still a place for the "art of obstetrics," that clinical skills are of paramount importance in today's environment of electronic monitoring. One wonders if such procedures such as forceps and vaginal breech deliveries which have decreased markedly, largely due to medicolegal considerations, are destined to be only read about in the future as subjects of historical interest. Certainly, resident training in these procedures is deficient at best.

Because of its format, there is some repetition of subject matter but this is of minor importance. In general, the chapters are well organized, clear, and informative.

I recommend *Operative Perinatology* without reservation to all practicing obstetricians, residents in training, as well as other ancillary personnel involved in the ante-, intra-, and postpartum care of mother and infant.

N. Irene Bilenki, M.D.
UMDNJ-New Jersey Medical School

OBITUARIES

Drs. Braitman; Brown; Cox; Dinenberg; Gurland; Halsted; Kuziw; Macalincag; Parry; Vics; Wilkerson; Withers

Dr. Max Braitman

A dermatologist and member of our Hudson County component, Max Braitman, M.D., died in Englewood Hospital on August 8, 1984, at the age of 74. Born in New York City, Dr. Braitman received his medical degree from Bellevue Hospital Medical College, New York, in 1936. He was a Fellow of the American College of Physicians, a Diplomate of the American Board of Dermatology, and a member of the American Medical Association. Dr. Braitman, during his lengthy career, had affiliations with a number of medical institutions including New York University Medical Center, where he had been associate clinical professor of dermatology; Bellevue Hospital, New York City; North Hudson Hospital, Weehawken; and Jersey City Medical Center. During World War II Dr. Braitman served in the medical corps of the United States Army.

Dr. Edith L. Brown

At the venerable age of 90, Edith Louise Brown, M.D., died on August 22, 1984, at the Geraldine L. Thompson Medical Home, Allenwood. Born in New York City, Dr. Brown earned her medical degree at George Washington University School of Medicine, Washington, D.C. in 1935. A member of our Monmouth County component, Dr. Brown established a general practice with emphasis on obstetrics first in Avon-by-the-Sea, and then in Ocean Grove. She had been affiliated with Jersey Shore Medical Center, Neptune, and Point Pleasant Hospital. Dr. Brown served 10 years with the Planned Parenthood Clinic, Asbury Park, and had been school physician for both Little Silver and New Shrewsbury (Tinton Falls) school districts.

Dr. William T.R. Cox

We have learned of the death of William T.R. Cox, M.D., on August 26, 1984. Born in 1910, Dr. Cox completed his medical education at Louisiana State Medical School, graduating in 1937. A surgeon, Dr. Cox was affiliated with Alexian Brothers and St. Elizabeth Hospitals, both in Elizabeth. Dr. Cox was a retired member of our Union County component, a Fellow of the American College of Surgeons, and a member of the American Medical Association.

Dr. Samuel Dinenberg

A neuropsychiatrist with offices in Ventnor, Samuel Dinenberg, M.D., died on September 14, 1984, at Atlantic City Medical Center, at the age of 74. Born in Philadelphia, Pennsylvania, Dr. Dinenberg was graduated from Hahnemann Medical College and Hospital in 1938. He practiced his specialty for 42 years, and had been an associate professor of psychiatry at the University of Pennsylvania. He was affiliated with the Medical Center, Atlantic City, and Shore Memorial Hospital, Somers Point. Dr. Dinenberg was board certified in his specialty, and had been a member of the American Medical Association.

Dr. Bernard B. Gurland

Bernard Benjamin Gurland, M.D., an ophthalmologist in Bayonne for 35 years, died in Bayonne Hospital on September 28, 1984. A native of Bayonne, born in 1913, Dr. Gurland received his medical degree from Tulane University School of Medicine in 1939. He was an associate professor at New York University, a Fellow of the American College of Surgeons, and was board certified in his specialty. Dr. Gurland was a member of the American Medical Association and had been affiliated with Bayonne Hospital and Bellevue Hospital, New York City. During World War II he served for six years in the medical corps of the Army of the United States. A son, Dr. Keith G. Gurland, continues in the practice established by his father.

Dr. George O. Halsted

Former chief of surgery for Englewood Hospital, George Oliver Halsted, M.D., died on August 22, 1984. Dr. Halsted retired from Englewood Hospital last year at age 62. Dr. Halsted earned his medical degree at Columbia University College of Physicians and Surgeons, New York, in 1944. During World War II, Dr. Halsted served as a physician with the Navy and then with the Marines during the Korean War. A member of our Bergen County component, Dr. Halsted was a Diplomate of the American Board of Surgery and a Fellow of the American College of Surgeons. Dr. Halsted also was affiliated with Bergen Pines Hospital, Paramus.

Dr. Tuhan Kuziw

At age 64, Tuhan Kuziw, M.D., died on September 16, 1984. For the past 24 years, Dr. Kuziw was an internist in Irvington; he was on the staffs of Clara Maass Medical Center, Belleville, Saint Barnabas Medical Center, Livingston, Saint Michael's Medical Center, Newark, and Irvington General Hospital. Dr. Kuziw graduated from Lwow University, Poland, with a medical degree in 1944; he completed an internship at Saint Barnabas Medical Center in 1952. Dr. Kuwiz was a member of our Essex County component and of the American Medical Association.

Dr. Loreto A. Macalincag

We just have learned of the death on August 28, 1984, of Loreto Alvarez Macalincag, M.D., while in the Philippines, where he was born in 1938. A member of our Hudson County component, Dr. Macalincag earned his medical degree at the In-

stitute of Medicine, Far Eastern University, Manila, in 1963. Upon emigrating to the United States, he established a practice in obstetrics and gynecology in Jersey City. Dr. Macalincag was affiliated with the Medical Center and Greenville Hospital, Jersey City, and St. Mary Hospital, Hoboken.

Dr. Allen A. Parry

An industrial physician and internist, Allen Almon Parry, M.D., an emeritus member of our Morris County component, died on September 19, 1984, at his retirement home, Belleair Beach, Florida. Born in 1909 in Pittsfield, Massachusetts, Dr. Parry earned his medical degree at the University of Rochester School of Medicine in 1936. He had been affiliated with Morristown Memorial Hospital, and had been a member of the American Medical Association. During World War II, Dr. Parry served in the medical department of the United States Army, emerging with the rank of major.

Dr. Erika Vics

A family practitioner prior to her retirement because of ill health, Erika Vics, M.D., died on September 17, 1984. Born in Latvia in 1912, Dr. Vics earned her medical degree at the University of Latvia Faculty of Medicine in 1936. During World War II, she served in hospitals, camps for displaced persons, and infirmaries in Germany. Following the war she worked as a laboratory technician in England until 1951, when she emigrated to the United States. She established a practice in Dover and was affiliated with Dover General Hospital. Dr. Vics was a member of our Morris County component and a member of the American Medical Association.

Dr. Wm. G. Wilkerson

Two days after undergoing open heart surgery at Walter Reed Army Hospital, Washington, D.C., William G. Wilkerson, M.D., died on September 21, 1984, at the age of 68. A member of our Hudson County component, Dr. Wilkerson was an obstetrician/gynecologist who had earned his medical degree at the Faculty of Medicine of the University of Geneva, Switzerland, in 1952. He had affiliations with Fairmount Hospital, Jersey City, Jersey City Medical Center, and St. Mary Hospital, Hoboken. Dr. Wilkerson was a Fellow of the American College of Obstetricians and Gynecologists, and of the American Society of Abdominal Surgeons. Dr. Wilkerson's life was multifaceted: he was one of the first blacks to represent Hudson County in the state legislature; for ten years he was president of the Jersey City branch of the NAACP; he was an ordained minister; and during World War II he served in the 99th Air Force Squadron as a fighter pilot.

Dr. George R. Withers

At the age of 57, George R. Withers, M.D., died on August 1, 1984. Born in Dublin, Dr. Withers earned his medical degree at the Royal College of Surgeons of Ireland in 1956. He completed a residency program at Monmouth Medical Center, Long Branch, and at Cooper Hospital, Camden. An anesthesiologist, Dr. Withers was affiliated with Jersey Shore Medical Center, Neptune, and Riverview Hospital, Red Bank. Dr. Withers was a member of our Monmouth County component and of the American Society of Anesthesiologists.

Style Sheet

The Journal *is the official organ of the Medical Society of New Jersey. The goals of* The Journal *are educational and informational. All material published in* The Journal *is copyrighted by MSNJ.*

CONTENT

The educational content of each issue appears as scientific articles, based on research, original concepts relative to epidemiology of disease, and treatment methodology; case reports based on unusual clinical experiences; review articles; clinical notes, succinct items on some aspect or new observation or technique of a case experience; and special articles, which include evaluations, policy and position papers, and reviews of nonscientific subjects. Other topics include commentary (critical narration); medical history; therapeutic drug information; pediatric briefs; nutrition update; and an opinion column. Editorials are prepared by the Editor and by guest contributors on timely and relevant subjects; editorials are the responsibility of the author. The Doctors' Notebook section contains organizational, informational, and administrative items from MSNJ and from the community. Letters to the Editor and book reviews are welcome and will be published as space permits. The principal aim in the preparation of a contribution should be relevance to diagnosis and treatment and to education of patients and professionals. Preference will be given to professional authors from New Jersey and to out-of-state lecturers who submit a suitable manuscript based on a presentation made in New Jersey.

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The **title page** should include the full name, degrees, and affiliations of all authors, and the name and address of the author to whom reprint requests should be sent.

The author should submit a 40-word **abstract** to be used at the beginning of the article.

Tables must be typewritten and double-spaced on separate 8½" by 11" sheets, with a title and number. Symbols for units should be confined to column headings, and abbreviations, properly explained, should be kept to a minimum.

Illustrations should be professional quality, black-and-white glossy prints. The name of the author, figure number, and the top of the figure should be noted on a label attached to the back of each illustration. Where photographs of patients are used, the subjects should not be identifiable or publication permission, signed by the subject or responsible person, must be included with the photograph. Material taken from other publications must give credit to the source; written permission for republication from the original publisher must be submitted. The cost of color photographs must be borne by the author.

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1. Goldwyn RM: Subcutaneous mastectomy. *J Med Soc NJ* 74:1050-1052, 1977.

2. Dixon WJ, Massey FJ: *Introduction to Statistical Analysis.* New York, NY, McGraw-Hill, 1969, pp. 42-48.

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September 1984

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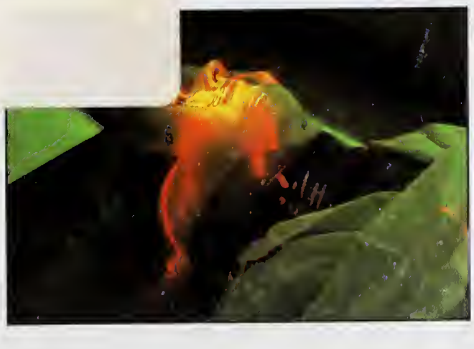
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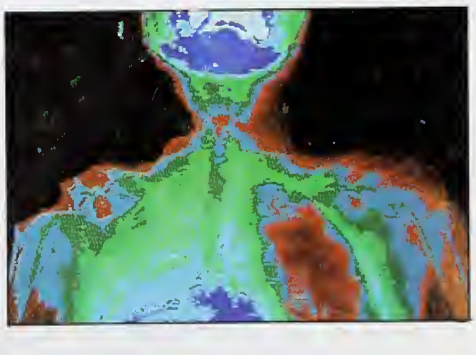
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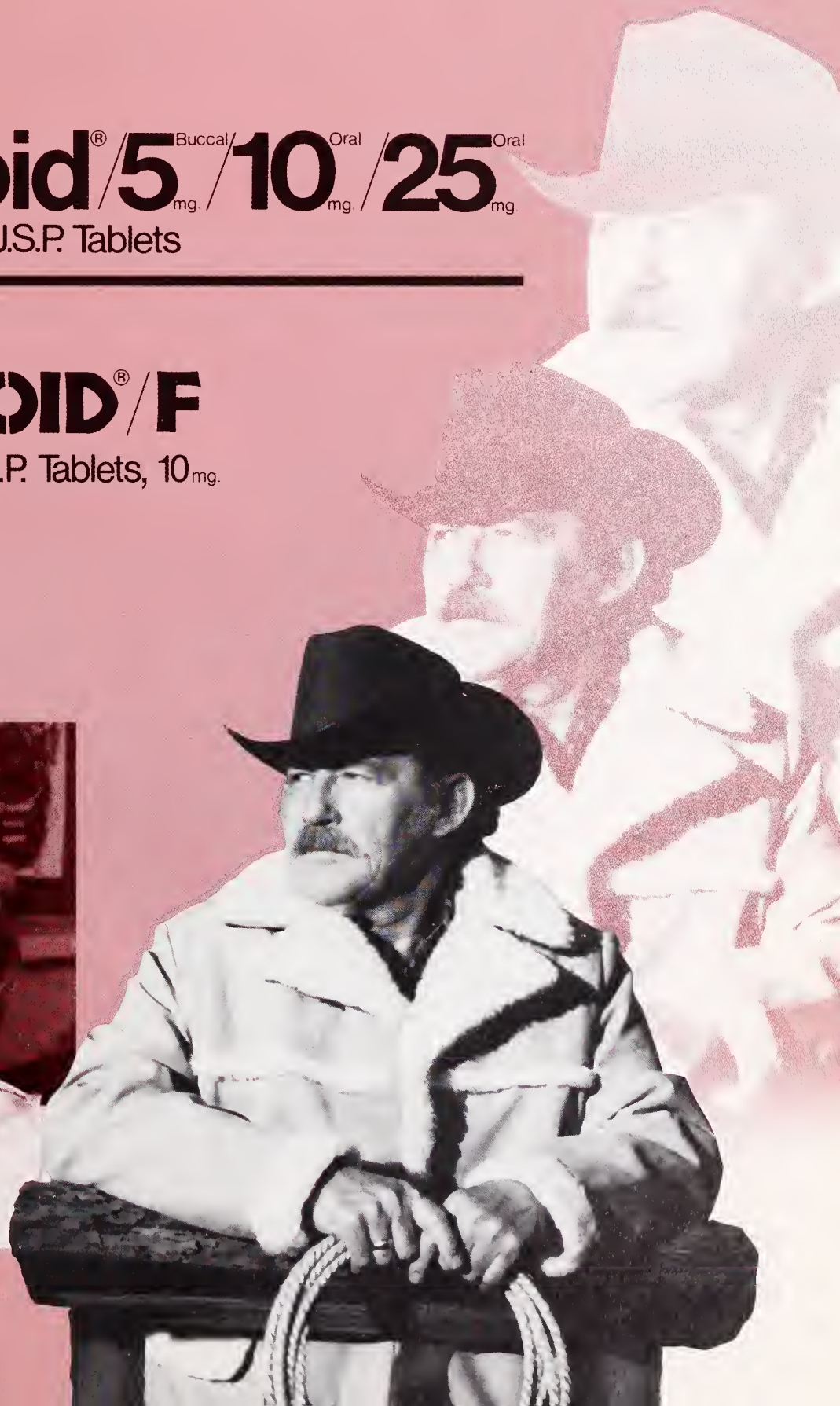
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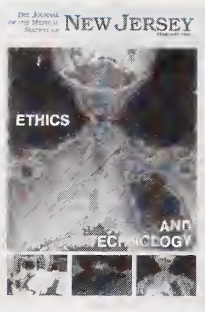
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The mechanism of the antihypertensive effect of INDERAL has not been established. Among the factors that may be involved in contributing to the antihypertensive action are (1) decreased cardiac output, (2) inhibition of renin release by the kidneys, and (3) diminution of tonic sympathetic nerve outflow from vasomotor centers in the brain. Although total peripheral resistance may increase initially, it readjusts to or below the pretreatment level with chronic use. Effects on plasma volume appear to be minor and somewhat variable. INDERAL has been shown to cause a small increase in serum potassium concentration when used in the treatment of hypertensive patients.

In angina pectoris, propranolol generally reduces the oxygen requirement of the heart at any given level of effort by blocking the catecholamine-induced increases in the heart rate, systolic blood pressure, and the velocity and extent of myocardial contraction. Propranolol may increase oxygen requirements by increasing left ventricular fiber length, end diastolic pressure and systolic ejection period. The net physiologic effect of beta-adrenergic blockade is usually advantageous and is manifested during exercise by delayed onset of pain and increased work capacity.

In dosages greater than required for beta blockade, INDERAL also exerts a quinidine-like or anesthetic-like membrane action which affects the cardiac action potential. The significance of the membrane action in the treatment of arrhythmias is uncertain.

The mechanism of the antimigraine effect of propranolol has not been established. Beta-adrenergic receptors have been demonstrated in the platelets of the brain.

Beta receptor blockade can be useful in conditions in which, because of pathologic or functional changes, sympathetic activity is detrimental to the patient. But there are also situations in which sympathetic stimulation is vital. For example, in patients with severely damaged hearts, adequate ventricular function is maintained by virtue of sympathetic drive which should be preserved. In the presence of AV block, greater than first degree, beta blockade may prevent the necessary facilitating effect of sympathetic activity on conduction. Beta blockade results in bronchial constriction by interfering with adrenergic bronchodilator activity which should be preserved in patients subject to bronchospasm.

Propranolol is not significantly dialyzable.
INDICATIONS AND USAGE. Hypertension: INDERAL LA is indicated in the management of hypertension; it may be used alone or used in combination with other antihypertensive agents, particularly a thiazide diuretic. INDERAL LA is not indicated in the management of hypertensive emergencies.

Angina Pectoris Due to Coronary Atherosclerosis: INDERAL LA is indicated for the long-term management of patients with angina pectoris.

Migraine: INDERAL LA is indicated for the prophylaxis of common migraine headache. The efficacy of propranolol in the treatment of a migraine attack that has started has not been established and propranolol is not indicated for such use.

Hypertrophic Subaortic Stenosis: INDERAL LA is useful in the management of hypertrophic subaortic stenosis, especially for treatment of exertional or other stress-induced angina, palpitations, and syncope. INDERAL LA also improves exercise performance. The effectiveness of propranolol hydrochloride in this disease appears to be due to a reduction of the elevated outflow pressure gradient which is exacerbated by beta-receptor stimulation. Clinical improvement may be temporary.
CONTRAINDICATIONS. INDERAL is contraindicated in 1) cardiogenic shock; 2) sinus bradycardia and greater than first degree block; 3) bronchial asthma; 4) congestive heart failure (see WARNINGS) unless the failure is secondary to a tachyarrhythmia treatable with INDERAL.
WARNINGS. CARDIAC FAILURE: Sympathetic stimulation may be a vital component supporting circulatory function in patients with congestive heart failure, and its inhibition by beta blockade may precipitate more severe failure. Although beta blockers should be avoided in overt congestive heart failure, if necessary, they can be used with close follow-up in patients with a history of failure who are well compensated and are receiving digitalis and diuretics. Beta-adrenergic blocking agents do not abolish the inotropic action of digitalis on heart muscle.

IN PATIENTS WITHOUT A HISTORY OF HEART FAILURE, continued use of beta blockers can, in some cases, lead to cardiac failure. Therefore, at the first sign or symptom of heart failure, the patient should be digitalized and/or treated with diuretics, and the response observed closely, or INDERAL should be discontinued (gradually, if possible).

IN PATIENTS WITH ANGINA PECTORIS, there have been reports of exacerbation of angina and, in some cases, myocardial infarction, following abrupt discontinuance of INDERAL therapy. Therefore, when discontinuance of INDERAL is planned the dosage should be gradually reduced over at least a few weeks, and the patient should be cautioned against interruption or cessation of therapy without the physician's advice. If INDERAL therapy is interrupted and exacerbation of angina occurs, it usually is advisable to reinstitute INDERAL therapy and take other measures appropriate for the management of unstable angina pectoris. Since coronary artery disease may be unrecognized, it may be prudent to follow the above advice in patients considered at risk of having occult atherosclerotic heart disease who are given propranolol for other indications.

Nonallergic Bronchospasm (e.g., chronic bronchitis, emphysema)—PATIENTS WITH BRONCHOSPASTIC DISEASES SHOULD IN GENERAL NOT RECEIVE BETA BLOCKERS. INDERAL should be administered with caution since it may block bronchodilation produced by endogenous and exogenous catecholamine stimulation of beta receptors.

MAJOR SURGERY: The necessity or desirability of withdrawal of beta-blocking therap prior to major surgery is controversial. It should be noted, however, that the impaired ability the heart to respond to reflex adrenergic stimuli may augment the risks of general anesthes and surgical procedures.

INDERAL (propranolol HCl), like other beta blockers, is a competitive inhibitor of bet receptor agonists and its effects can be reversed by administration of such agents, e.g dobutamine or isoproterenol. However, such patients may be subject to protracted seve hypotension. Difficulty in starting and maintaining the heartbeat has also been reported wi beta blockers.

DIABETES AND HYPOGLYCEMIA: Beta-adrenergic blockade may prevent the ap pearance of certain premonitory signs and symptoms (pulse rate and pressure changes) acute hypoglycemia in labile insulin-dependent diabetes. In these patients, it may be mo difficult to adjust the dosage of insulin.

THYROTOXICOSIS: Beta blockade may mask certain clinical signs of hyperthyroidism Therefore, abrupt withdrawal of propranolol may be followed by an exacerbation of symptom of hyperthyroidism, including thyroid storm. Propranolol does not distort thyroid function test

IN PATIENTS WITH WOLFF-PARKINSON-WHITE SYNDROME, several cases have bee reported in which, after propranolol, the tachycardia was replaced by a severe bradycardi requiring a demand pacemaker. In one case this resulted after an initial dose of 5 m propranolol.
PRECAUTIONS. *General:* Propranolol should be used with caution in patients with impaire hepatic or renal function. INDERAL is not indicated for the treatment of hypertensiv emergencies.

Beta adrenoreceptor blockade can cause reduction of intraocular pressure. Patient should be told that INDERAL may interfere with the glaucoma screening test. Withdrawal ma lead to a return of increased intraocular pressure.

Clinical Laboratory Tests: Elevated blood urea levels in patients with severe heart disease elevated serum transaminase, alkaline phosphatase, lactate dehydrogenase.

DRUG INTERACTIONS: Patients receiving catecholamine-depleting drugs such as rese pine should be closely observed if INDERAL is administered. The added catecholamine blocking action may produce an excessive reduction of resting sympathetic nervous activit which may result in hypotension, marked bradycardia, vertigo, syncopal attacks, or orthostati hypotension.

Carcinogenesis, Mutagenesis, Impairment of Fertility: Long-term studies in animals hav been conducted to evaluate toxic effects and carcinogenic potential. In 18-month studies i both rats and mice, employing doses up to 150 mg/kg/day, there was no evidence of significar drug-induced toxicity. There were no drug-related tumorigenic effects at any of the dosag levels. Reproductive studies in animals did not show any impairment of fertility that wa attributable to the drug.

Pregnancy: Pregnancy Category C. INDERAL has been shown to be embryotoxic i animal studies at doses about 10 times greater than the maximum recommended human dose There are no adequate and well-controlled studies in pregnant women. INDERAL shoul be used during pregnancy only if the potential benefit justifies the potential risk to the fetus

Nursing Mothers: INDERAL is excreted in human milk. Caution should be exercised whe INDERAL is administered to a nursing woman.

Pediatric Use: Safety and effectiveness in children have not been established.
ADVERSE REACTIONS. Most adverse effects have been mild and transient and hav rarely required the withdrawal of therapy.

Cardiovascular: bradycardia, congestive heart failure; intensification of AV block; hypo tension; paresthesia of hands; thrombocytopenic purpura, arterial insufficiency, usually of th Raynaud type.

Central Nervous System: lightheadedness; mental depression manifested by insomnia lassitude, weakness, fatigue; reversible mental depression progressing to catatonia; visua disturbances; hallucinations; an acute reversible syndrome characterized by disorientation fo time and place, short-term memory loss, emotional lability, slightly clouded sensorium, and decreased performance on neuropsychometrics.

Gastrointestinal: nausea, vomiting, epigastric distress, abdominal cramping, diarrhea constipation, mesenteric arterial thrombosis, ischemic colitis.

Allergic: pharyngitis and agranulocytosis, erythematous rash, fever combined with achin and sore throat, laryngospasm and respiratory distress.

Respiratory: bronchospasm.

Hematologic: agranulocytosis, nonthrombocytopenic purpura, thrombocytopenic purpura.

Auto-Immune: In extremely rare instances, systemic lupus erythematosus has been reported.

Miscellaneous: alopecia, LE-like reactions, psoriasiform rashes, dry eyes, male impo tence, and Peyronie's disease have been reported rarely. Oculomucocutaneous reaction involving the skin, serous membranes and conjunctivae reported for a beta blocker (practolol have not been associated with propranolol.
DOSAGE AND ADMINISTRATION. INDERAL LA provides propranolol hydrochloride in a sustained-release capsule for administration once daily. If patients are switched from INDERAL tablets to INDERAL LA capsules, care should be taken to assure that the desired therapeutic effect is maintained. INDERAL LA should not be considered a simple mg for mg substitute fo INDERAL. INDERAL LA has different kinetics and produces lower blood levels. Retitration ma be necessary especially to maintain effectiveness at the end of the 24-hour dosing interval

HYPERTENSION—*Dosage must be individualized.* The usual initial dosage is 80 m INDERAL LA once daily, whether used alone or added to a diuretic. The dosage may be increased to 120 mg once daily or higher until adequate blood-pressure control is achieved. The usual maintenance dosage is 120 to 160 mg once daily. In some instances a dosage of 640 mg may be required. The time needed for full hypertensive response to a given dosage is variable and may range from a few days to several weeks.

ANGINA PECTORIS—*Dosage must be individualized.* Starting with 80 mg INDERAL LA once daily, dosage should be gradually increased at three to seven day intervals until optimum response is obtained. Although individual patients may respond at any dosage level, the average optimum dosage appears to be 160 mg once daily. In angina pectoris, the value and safety of dosage exceeding 320 mg per day have not been established.

If treatment is to be discontinued, reduce dosage gradually over a period of a few weeks (see WARNINGS).

MIGRAINE—*Dosage must be individualized.* The initial oral dose is 80 mg INDERAL LA once daily. The usual effective dose range is 160-240 mg once daily. The dosage may be increased gradually to achieve optimum migraine prophylaxis. If a satisfactory response is not obtained within four to six weeks after reaching the maximum dose, INDERAL LA therapy should be discontinued. It may be advisable to withdraw the drug gradually over a period of several weeks.

HYPERTROPHIC SUBAORTIC STENOSIS—80-160 mg INDERAL LA once daily.
PEDIATRIC DOSAGE—At this time the data on the use of the drug in this age group are too limited to permit adequate directions for use.

*The appearance of INDERAL LA capsules is a registered trademark of Ayerst Laboratories.

8833/384

Ayerst® AYERST LABORATORIES
New York, N.Y. 10017

MEMBERSHIP NEWSLETTER

MSNJ

THE MEDICAL SOCIETY OF NEW JERSEY VOLUME 19

HIGH-RISK MATERNITY HOTLINE

The Statewide Perinatal Services and Research Center's obstetrical service division at University Hospital, Newark, offers a special hotline number for the referral of high-risk maternity patients by community physicians throughout the state. The hotline number, (201) 456-6840, can be used to provide direct and immediate physician-to-physician contact for consultation and to alert labor/delivery to the arrival of a high-risk maternity patient.

The hotline is designed to be used in urgent and emergency patient care situations such as premature rupture of membranes or premature labor, severe preeclampsia, or third trimester bleeding. The Perinatal Center also offers a variety of clinical support services at its University Hospital division for the management of high-risk pregnancies throughout the prenatal period. A comprehensive obstetrical evaluation program is utilized to determine the nature and extent of all at-risk situations. This evaluation can include nonstress tests and oxytocin challenge tests; ultrasound diagnosis to determine intrauterine growth rate, multiple gestation, and placenta localization and grading; and a complete genetics assessment through counseling and diagnosis—amniocenteses, chronic villi sampling, and alpha-fetoprotein tests. These services and physician and/or nurse consultations can be accessed by calling Perinatal Center at (201) 456-6785.

SPECIAL JOURNAL ISSUES

The Journal of the Medical Society of New Jersey has reprinted the William Carlos Williams Commemorative Issue (September 1983), a celebration of this New Jersey physician and poet.

The September 1984 issue of *The Journal* is a study of the history of the healing art in this state. "300 Years of Medicine in New Jersey" is a collection of essays intended to dispel erroneous myths about the health professionals of New Jersey.

Both issues are available from MSNJ, Two Princess Road, Lawrenceville, NJ 08648, for $5.

MSNJ ANNUAL MEETING

The Medical Society of New Jersey will be conducting its 219th Annual Meeting, May 2 through May 5, 1985, at the Americana Host Farm Resort, in Lancaster, Pennsylvania. You can plan your arrival for Thursday, May 2nd with a Sunday, May 5th departure.

There will be 500 rooms available at Host Farm Resort and an additional 100 rooms available in the immediate area.

The Hotel will maintain a shuttle bus service to and from the Host Farm Building and the Host Corral Building.

This Annual Meeting will have total exclusivity of all function rooms, dining rooms, golf and tennis facilities, entertainment, health clubs, swimming pools, two miles of bicycle and jogging trails, and handball.

Sightseeing and factory outlet shopping here in the beautiful Pennsylvania Dutch Country will be very appealing.

HYPERTENSION TREATMENT

Chewing perforated nifedipine capsules is a safe and effective way to lower blood pressure promptly without parenteral medications, according to Jacob I. Haft, M.D., and William E. Litterer III, D.O., in the December issue of *Archives of Internal Medicine.* Within 13 minutes, blood pressures of 42 emergency room patients dropped from an average of 205 over 127 to 158 over 88. "There were no side effects and no hypotension even among the 38 patients who recently had received other medications," reported the cardiologists from St. Michael's Medical Center, Newark. Nifedipine is a calcium blocker.

LEGISLATIVE UPDATE

Status of Legislation on Which MSNJ Has Taken an Active Position

Bill	Subject	MSNJ Position	Committee	Present Status
S-70 Codey	To change requirements for eligibility to be Commissioner of Health	Active Opposition	Senate: IHW	In committee
S-111 Bubba	To require a physician to present surgical consent forms at the time surgery is agreed upon	Active Opposition	Senate: LIP	In committee
S-243 Hagedorn	To provide procedures for involuntary civil commitment of the mentally ill	Active Opposition	Senate: IHW	In committee
S-424 Dorsey	To provide for the abolishment of certain state agencies for specific periods of time and to create a Joint Legislative Committee on Regulatory Agencies	Active Support	Senate: SGF&IR&VA	In committee
S-607 Bassano	To require the padding of all metal bars in school buses with energy-absorbing materials to be included in the State Board of Education's rules and regulations	Active Support	Senate: LPS&D	In committee
S-723 Brown	To require the State Department of Health to prepare a booklet on breast cancer and require physicians to give a copy of the booklet to breast cancer patients	Active Opposition	Senate: IHW	In committee
S-752 Hirkala	To provide that certain information of hospitals and long-term health care facility review committees be considered confidential	Active Support	Senate: IHW	In committee
S-754 Hirkala	To provide immunity from civil liability to members of hospital governing bodies in connection with certain review actions	Active Support	Senate: J	In committee
S-1067 Feldman	To establish and license two categories of social workers	Active Opposition	Senate: IHW	In committee
S-1079 Dumont	Provides for a three-year statute of limitations, except for fraud, intentional concealment, or nontherapeutic or diagnostic purpose. Minors have until age 11 or any injury prior to age 8	Active Support	Senate: J	In committee
S-1112 Hurley	To establish a cap on the amount of damages which may be awarded for pain and suffering in certain civil actions	Active Support	Senate: J	In committee
S-1135 Dalton	To eliminate certain sources of windfall benefits in personal injury and wrongful death actions	Active Support	Senate: J	In committee

LEGISLATIVE UPDATE

Status of Legislation on Which MSNJ Has Taken an Active Position

Bill	Subject	MSNJ Position	Committee	Present Status
S-1140 Feldman	To impose certain requirements on the plaintiff in a medical malpractice proceeding	Active Support	Senate: J	In committee
S-1182 Saxton	To establish the Automobile Insurance Medical Fee Schedule Board	Active Opposition	Senate: LIP	In committee
S-1190 Feldman	To authorize a court to award reasonable attorney's fees to a party with a frivolous claim for relief in a civil action	Active Support	Senate: J	In committee
S-1714 Bassano	Licenses podiatric x-ray technicians and allows them to take x-rays of the leg* and foot area. Their curriculum and examination will be established and conducted by the Radiologic Technology Board of Examiners (*Note: Current law limits podiatrist to "lower leg" and foot.)	Active Opposition	Senate: LIP	Out of committee, amended; 2nd reading
S-1775 Orechio	Allows chiropractors who are licensed to practice by written examination in any state and who have completed 4,300 classroom hours in a chiropractic school to become licensed to practice by virtue of a clinical examination	Active Opposition	Senate: LIP	Out of Assembly; 2nd reading
S-1839 Dalton	Amends existing law to allow a psychologist to supply evidence of a need for guardianship of a minor who is in the custody of the Division of Mental Retardation	Active Opposition	Senate: IHW	Out of committee; 2nd reading; amended
S-1840 Cardinale	Exempts the private practice of medicine from the certificate of need law	Active Support	Senate: IHW	In committee
S-1846 Garibaldi	Provides that cancers caused by exposure to heat, cold, radiation, or a known carcinogen which manifest themselves in active police or firemen are assumed to be accidental and work-related disabilities	Active Opposition	Senate: SGF&IR&VA	In committee
S-2019 Lynch	Creates the profession of contact lens dispensing and fitting for nonphysicians and nonoptometrists. Licensure and regulation would be by Board of Examiners of Ophthalmic Dispensers and Ophthalmic Technicians. Prescription by licensed optometrist or physician would be required.	Active Opposition	Senate: LIP	In committee

LEGISLATIVE UPDATE

Status of Legislation on Which MSNJ Has Taken an Active Position

Bill	Subject	MSNJ Position	Committee	Present Status
S-2051 Feldman	Appropriates $9.45 million to design an osteopathic medical school in Stratford. Also provides construction monies for classrooms and administrative offices	Active Opposition	Senate: ED	Out of committee; 2nd reading; amended
A-115 Otlowski	To authorize optometrists to prescribe a limited number of eye medications	Active Opposition	Assembly: HERP	In committee
A-708 Hardwick	To create a temporary committee to study Diagnosis Related Group System used for setting hospital rates and appropriate $45,000	Active Support	Assembly: CHHS	In committee
A-926 Weidel	To create an Automobile Insurance Fee Schedule Board in the Department of Insurance to adopt a reasonable fee schedule for medical services arising from passenger automobile accidents	Active Opposition	Assembly: BI	In committee
A-960 Miller	To permit individual patients or insurers to appeal hospital bills in cases of assignments under the Diagnosis Related Groups	Active Support	Assembly: CHHS	In committee
A-963 Miller	To eliminate the Diagnosis Related Groups methodology and replace it with one to be devised by the Department of Health in one year	Active Support	Assembly: CHHS	In committee
A-1056 Muziani	To require attending physicians and certified nurse midwives to inform pregnant women of any drugs expected to be used during pregnancy and the possible effects	Active Opposition	Assembly: CHHS	Passed in Assembly; received in Senate committee
A-1116 Patero	To permit licensed psychologists to certify disability under Temporary Disability Benefits Law	Active Opposition	Assembly: L	Out of committee; 2nd reading; amended
A-1159 Herman	To require licensed physicians or chiropractors to notify the Board of Medical Examiners if they accept Medicare assignments	Active Opposition	Assembly: HERP	Out of committee; 2nd reading amended
A-1471 Garvin	To require a physician to obtain, in advance, the patient's authorization to perform a biopsy or mastectomy	Active Opposition	Senate: IHW	Signed into law as c. 185 P.L. 1984
A-1541 Karcher	To provide for the licensing of persons who practice hypnosis and limit the practice, teaching, or preparation of hypnosis tapes to licensed practitioners	Active Opposition	Assembly: HERP	In committee

LEGISLATIVE UPDATE

Status of Legislation on Which MSNJ Has Taken an Active Position

Bill	Subject	MSNJ Position	Committee	Present Status
A-1559 Garvin	Requires Dept. of Health and the State Board of Medical Examiners to prepare a booklet on all aspects of the treatment of breast cancer. Physicians are required to distribute the book to appropriate patients and to discuss it with them.	Active Opposition	Assembly: CHHS	In committee
A-1682 Muhler	Creates a seven-person Board within the Department of Human Services vested with the authority to release or continue the commitment of persons who were found incapable of standing trial or not guilty by reasons of insanity. A Superior Court judge currently makes these decisions	Active Opposition	Assembly: CHHS	In committee
A-1870 Garvin	Amends existing statutes to require either seat belts or restraint systems for all children under ten in a motor vehicle. Current law applies to children under age five	Active Support	Assembly: CI	In committee
A-1921 Miller	Establishes a 3-year statute of limitations in tort actions against health care providers. Children would have until age 11 to bring action for injuries prior to age 8. After age 8, they come under the 3-year standard. Fraud, concealment, and unintentional foreign bodies "toll" the statute	Active Support	Assembly: JUD	In committee
A-1922 Miller	Provides that within 60 days of filing a medical malpractice complaint, the plaintiff must supply an affidavit, by a qualified expert, that reasonable cause exists to believe malpractice occurred	Active Support	Assembly: JUD	In committee
A-2115 Otlowski	Permits optometrists to use topical drugs for treatment and diagnostic purposes	Active Opposition	Assembly: CHHS	Returned to Committee
AR-31 Herman	Requests the Commissioner of Health to vigorously educate the public, particularly young people, about the dangers of cigarette smoking	Active Support	Assembly: CHHS	In committee
A-1918 Miller	Provides that collateral sources of payment shall be used to offset damages. Further provides structured payments may be used at the request of either party if the future damages exceed $100,000	Active Support	Assembly: JUD	In committee

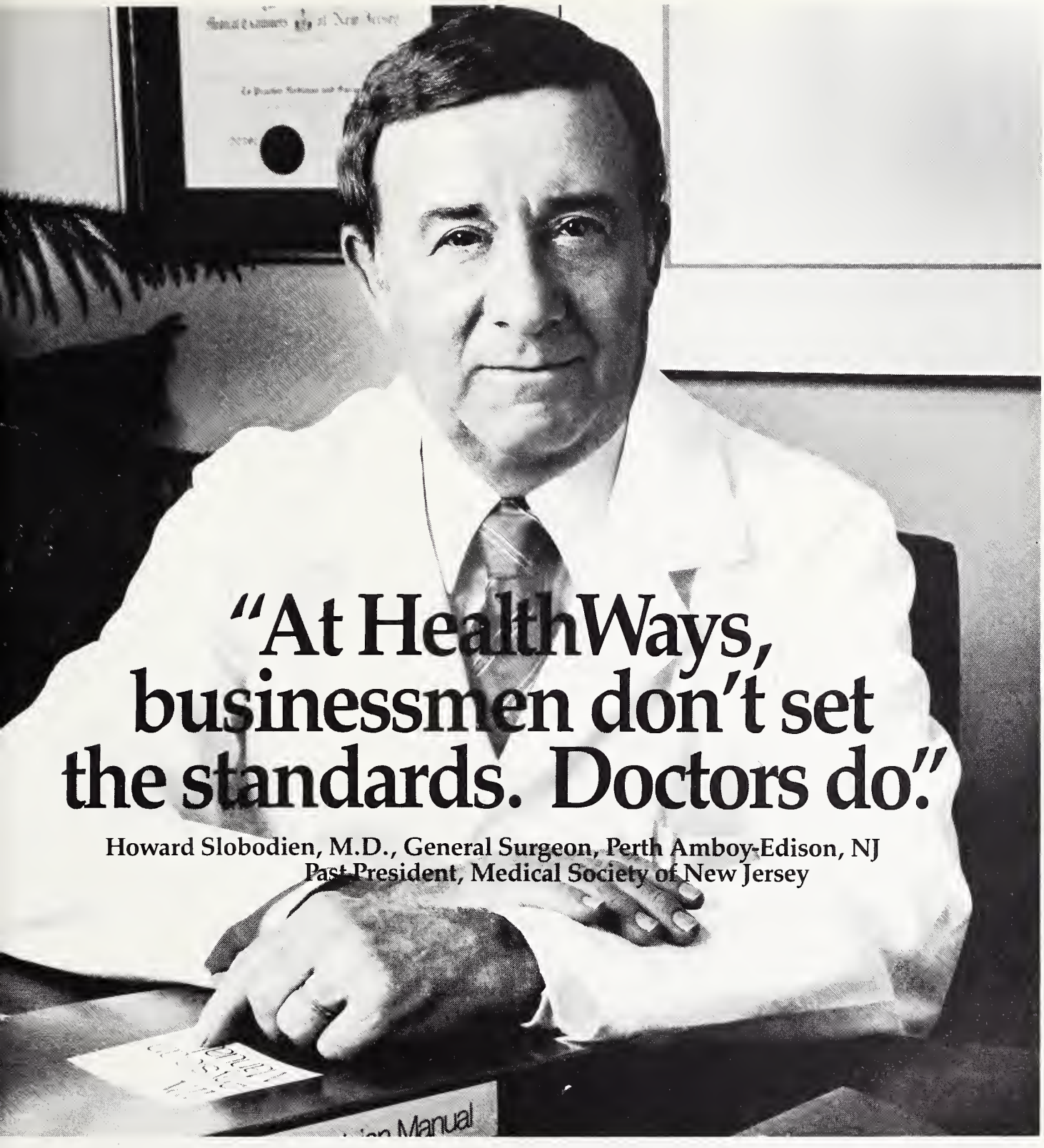
LEGISLATIVE UPDATE

Status of Legislation on Which MSNJ Has Taken an Active Position

Bill	Subject	MSNJ Position	Committee	Present Status
A-1919 Miller	Provides a $100,000 cap on damages for pain and suffering to personal injury actions	Active Support	Assembly: JUD	In committee
A-2106 Paterniti	Requires nursing homes with 100 beds or more to dedicate 10 percent of bed capacity to indigent, 10 percent to complex care, and 10 percent for medical day care services	Active Opposition	Assembly: CHHS	In committee
A-2122 Cooper	Establishes seating restraint and emergency exit requirements for school buses	Active Support	Assembly: ED	In committee
A-2293 Kalik	Appropriates $9.45 million for the UMDNJ Osteopathic School in Stratford	Active Opposition	Assembly: RFA	Out of Senate; 2nd reading
A-2304	To require that the driver and passengers in the front seat of an operating passenger automobile wear the safety seat belt provided	Active Support	Assembly: LPSD	Signed into law as c. 179 P.L. 1984

Senate Committee Key	
ED:	Education
IHW:	Institutions, Health and Welfare
J:	Judiciary
LIP:	Labor, Industry and Professions
LPS&D:	Law, Public Safety and Defense
SGF&IR&VA:	State Government, Federal & Interstate Relations & Veterans Affairs

Assembly Committee Key	
BI:	Banking and Insurance
CHHS:	Corrections, Health and Human Services
CI:	Commerce and Industry
ED:	Education
HERP:	Higher Education and Regulated Professions
JUD:	Judicial
L:	Labor
LPSD:	Law, Public Safety and Defense
RFA:	Revenue, Finance and Appropriations



"At HealthWays, businessmen don't set the standards. Doctors do."

Howard Slobodien, M.D., General Surgeon, Perth Amboy-Edison, NJ
Past President, Medical Society of New Jersey

"Before I joined my local IPA (Individual Practice Association), which is a participant in HealthWays, I needed some basic questions answered.

Question 1: With cost containment so critical to the HealthWays' philosophy, will I have to follow guidelines set up by an accountant?

Answer: No. All the medical checks and balances in HealthWays are checked and balanced by doctors. Colleagues all. Their guidelines are far from arbitrary. They not only make for good medicine, they make good sense.

Question 2: Can I maintain the high quality of my practice without worrying about driving patients to the poorhouse?

Answer: With HealthWays' unique reimbursement policy —I can and do. They even cover routine check-ups, and you know their importance.

Question 3: Are there any other practical advantages for the physician?

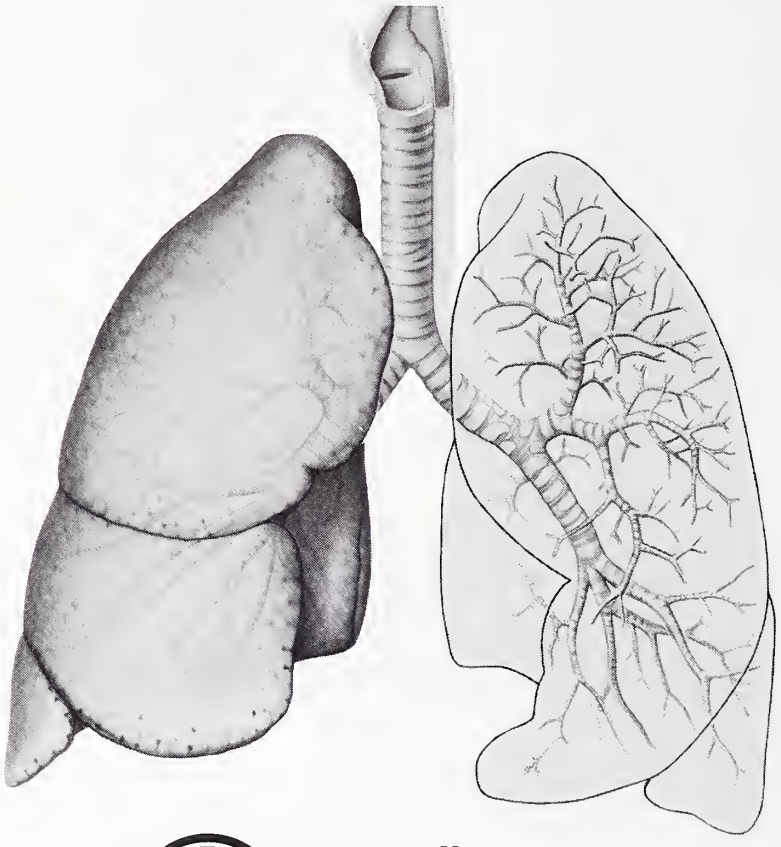
Answer: Yes. Several. Since all bills are directed to HealthWays, there are no bad debts with my HealthWays patients. There are also other benefits which you should check out for yourself."

For answers to all your questions and full information, call Jon Marsicano, M.D., Vice President, Medical Affairs, at 1-800-624-0720.

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Consider the causative organisms...



Ceclor®
cefaclor
250-mg Pulvules® t.i.d.

offers effectiveness against the major causes of bacterial bronchitis

H. influenzae*, *H. influenzae*, *S. pneumoniae*, *S. pyogenes
(ampicillin-susceptible) (ampicillin-resistant)

Brief Summary. Consult the package literature for prescribing information.

Indications and Usage: Ceclor* (cefaclor, Lilly) is indicated in the treatment of the following infections when caused by susceptible strains of the designated microorganisms.

Lower respiratory infections, including pneumonia caused by *Streptococcus pneumoniae* (*Diplococcus pneumoniae*), *Haemophilus influenzae*, and *S. pyogenes* (group A beta-hemolytic streptococci).

Appropriate culture and susceptibility studies should be performed to determine susceptibility of the causative organism to Ceclor.

Contraindication: Ceclor is contraindicated in patients with known allergy to the cephalosporin group of antibiotics.

Warnings: IN PENICILLIN-SENSITIVE PATIENTS, CEPHALOSPORIN ANTIBIOTICS SHOULD BE ADMINISTERED CAUTIOUSLY. THERE IS CLINICAL AND LABORATORY EVIDENCE OF PARTIAL CROSS-ALLERGENICITY OF THE PENICILLINS AND THE CEPHALOSPORINS, AND THERE ARE INSTANCES IN WHICH PATIENTS HAVE HAD REACTIONS, INCLUDING ANAPHYLAXIS, TO BOTH DRUG CLASSES.

Antibiotics, including Ceclor, should be administered cautiously to any patient who has demonstrated some form of allergy, particularly to drugs.

Pseudomembranous colitis has been reported with virtually all broad-spectrum antibiotics (including macrolides, semisynthetic penicillins, and cephalosporins); therefore, it is important to consider its diagnosis in patients who develop diarrhea in association with the use of antibiotics. Such colitis may range in severity from mild to life-threatening.

Treatment with broad-spectrum antibiotics alters the normal flora of the colon and may permit overgrowth of clostridia. Studies indicate that a toxin produced by *Clostridium difficile* is one primary cause of antibiotic-associated colitis.

Mild cases of pseudomembranous colitis usually respond to drug discontinuance alone. In moderate to severe cases, management should include sigmoidoscopy, appropriate bacteriologic studies, and fluid, electrolyte, and protein supplementation. When the colitis does not improve after the drug has been discontinued, or when it is severe, oral vancomycin is the drug of choice for antibiotic-associated pseudomembranous colitis produced by *C. difficile*. Other causes of colitis should be ruled out.

Precautions: *General Precautions* — If an allergic reaction to Ceclor* (cefaclor, Lilly) occurs, the drug should be discontinued, and, if necessary, the patient should be treated with appropriate agents, e.g., pressor amines, antihistamines, or corticosteroids.

Prolonged use of Ceclor may result in the overgrowth of nonsusceptible organisms. Careful observation of the patient is essential. If superinfection occurs during therapy, appropriate measures should be taken.

Positive direct Coombs' tests have been reported during treatment with the cephalosporin antibiotics. In hematologic studies or in transfusion cross-matching procedures when antiglobulin tests are performed on the minor side or in Coombs' testing of newborns whose mothers have received cephalosporin antibiotics before parturition, it should be recognized that a positive Coombs' test may be due to the drug.

Ceclor should be administered with caution in the presence of markedly impaired renal function. Under such conditions, careful clinical observation and laboratory studies should be made because safe dosage may be lower than that usually recommended.

As a result of administration of Ceclor, a false-positive reaction for glucose in the urine may occur. This has been observed with Benedict's and Fehling's solutions and also with Clinitest® tablets but not with Tes-Tape® (Glucose Enzymatic Test Strip, USP, Lilly).

Broad-spectrum antibiotics should be prescribed with caution in individuals with a history of gastrointestinal disease, particularly colitis.

Usage in Pregnancy — *Pregnancy Category B* — Reproduction studies have been performed in mice and rats at doses up to 12 times the human dose and in ferrets given three times the maximum human dose and have revealed no evidence of impaired fertility or harm to the fetus due to Ceclor* (cefaclor, Lilly). There are, however, no adequate and well-controlled studies in pregnant women. Because animal reproduction studies are not always predictive of human response, this drug should be used during pregnancy only if clearly needed.

Nursing Mothers — Small amounts of Ceclor have been detected in mother's milk following administration of single 500-mg doses. Average levels were 0.18, 0.20, 0.21, and 0.16 mcg/ml at two, three, four, and five hours respectively. Trace amounts were detected at one hour. The effect on nursing infants is not known. Caution should be exercised when Ceclor is administered to a nursing woman.

Usage in Children — Safety and effectiveness of this product for use in infants less than one month of age have not been established.

Adverse Reactions: Adverse effects considered related to therapy with Ceclor are uncommon and are listed below.

Gastrointestinal symptoms occur in about 2.5 percent of patients and include diarrhea (1 in 70).

Symptoms of pseudomembranous colitis may appear either during or after antibiotic treatment. Nausea and vomiting have been reported rarely.

Hypersensitivity reactions have been reported in about 1.5 percent of patients and include morbiliform eruptions (1 in 100). Pruritus, urticaria, and positive Coombs' tests each occur in less than 1 in 200 patients. Cases of serum-sickness-like reactions (erythema multiforme or the above skin manifestations accompanied by arthritis/arthralgia and, frequently, fever) have been reported. These reactions are apparently due to hypersensitivity and have usually occurred during or following a second course of therapy with Ceclor. Such reactions have been reported more frequently in children than in adults. Signs and symptoms usually occur a few days after initiation of therapy and subside within a few days after cessation of therapy. No serious sequelae have been reported. Antihistamines and corticosteroids appear to enhance resolution of the syndrome.

Cases of anaphylaxis have been reported, half of which have occurred in patients with a history of penicillin allergy.

Other effects considered related to therapy included eosinophilia (1 in 50 patients) and genital pruritus or vaginitis (less than 1 in 100 patients).

Causal Relationship Uncertain — Transitory abnormalities in clinical laboratory test results have been reported. Although th were of uncertain etiology, they are listed below to serve as alerting information for the physician.

Hepatic — Slight elevations in SGOT, SGPT, or alkaline phosphatase values (1 in 40).

Hematopoietic — Transient fluctuations in leukocyte count, predominantly lymphocytosis occurring in infants and young children (1 in 40).

Renal — Slight elevations in BUN or serum creatinine (less th 1 in 500) or abnormal urinalysis (less than 1 in 200).

[0617821

Note: Ceclor* (cefaclor, Lilly) is contraindicated in patients with known allergy to the cephalosporins and should be given cautiously to penicillin-allergic patients.

Penicillin is the usual drug of choice in the treatment and prevention of streptococcal infections, including the prophylax of rheumatic fever. See prescribing information.

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Lilly

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Additional information available to the profession on request from Eli Lilly and Company, Indianapolis, Indiana 46285

Eli Lilly Industries, Inc.
Carolina, Puerto Rico 00630

PROFESSIONAL LIABILITY COMMENTARY*

Drug Claim and Snitch Laws

Accutane® Claims; Professional Liability "Snitch" Laws; Brief Notes

The drug Accutane,® introduced in recent years and proved effective in cases of serious cystic acne, has been linked with birth deformities including hydrocephalus, microcephaly, and abnormalities of the external ear and the auditory canals. The manufacturer, Roche Laboratories, has warned that women of childbearing potential use an effective contraceptive when taking the product and is on record as recommending that contraception be continued for one month or until a normal menstrual period has occurred following discontinuation of the drug.

NORCAL Mutual Insurance Company alerted its insureds late this summer to two claims reported from the use of Accutane®. Said NORCAL: "In each case the patient became pregnant. In one case, the child was born without ears and with a patent ductus; in the other, an abortion resulted."

The northern California company said that physicians prescribing the acne drug "should be very cautious when prescribing it to a woman of childbearing age" and should give "the appropriate informed consent and clearly document it in writing." Nor should the physician rely upon the pharmacist supplying the drug to provide the information; he or she should provide it to the patient personally.

Accutane® (isotretinoin) is related to vitamin A so Roche further warns that patients taking it should not take vitamin supplements containing vitamin A to avoid additive toxic effects. According to the *Physicians' Desk Reference* approximately 25 percent of patients receiving Accutane® demonstrated an elevation in plasma triglycerides, 15 percent developed a decrease in high density lipoproteins, and about 7 percent showed an increase in cholesterol levels. These effects were reversible when Accutane® therapy was stopped (*Medical Liability Monitor*, Vol. 9, No. 10, October 27, 1984).

IMPACT OF THE SNITCH LAWS ON MEDICAL MALPRACTICE†

I have been asked to comment on the impact of the "snitch" laws on professional liability. Those laws were signed by the Governor in July 1983, to be effective in August 1983.

For the purposes of this discussion, it is important to note that there are two elements to the reporting laws. The first requires malpractice insurers that make indemnity payments exceeding $25,000 on behalf of any insured physician to report the particulars to the State Board of Medical Examiners. The second requires hospitals, following final governing board action, to report to the State Board impaired physicians or any action adversely affecting a physician's privileges because of lack of required competence.

Reports have been slow in developing because of several factors including the design of report forms and the promulgation of necessary regulations. The major concern I have is the reporting of settlements and awards exceeding $25,000, and I will confine this discussion to that issue.

Currently, the Medical Inter-Insurance Exchange of New Jersey (MIIENJ) is reporting 20 cases per month to the State Board of Medical Examiners. It is reasonable to assume the other carriers are reporting 10 cases. The annualized volume would be 360 cases. This is 200 cases more than our calculated estimate in 1982, when the statute was in bill form. At this point, there is little to report on the actual impact, since the State Board of Medical Examiners has been unable to secure computer programming and time. They hope to resolve this matter shortly.

I do not wish to pursue speculating on the possibilities. It is clear to me, however, that if the State Board continues to follow the trend established in three cases in fairly recent years dealing with malpractice, the future for medicine is bleak. It is important that you understand the difference between civil malpractice and a proceeding before the State Board.

In a civil suit, the plaintiff retains a lawyer who sues you. You and/or your carrier retain a lawyer to defend. The evidence is presented to a jury not connected with either party, and the case is presided over by a judge that has no vested interest in the outcome.

In a State Board proceeding, the Board decides to prosecute you. Your attorney defends. The case is pros-

*This item from the Department of Professional Liability Control, MSNJ, was prepared by James E. George, M.D., J.D., and A. Ronald Rouse, who are, respectively, Director of the Department and Director of Special Projects.

†Address of Vincent A. Maressa at the Fifth Annual Medical-Legal Seminar of MSNJ and MIIENJ, September 12, 1984.

ecuted by a deputy attorney general assigned to the Board to prosecute and/or advise the Board. Roles are alternated as cases are rotated. The case then is assigned to an administrative law judge, who hears proofs and submits findings and recommendations. The Board receives the administrative law judge's report and can accept, reject, or modify on all issues. Another deputy attorney general advises the Board as to whether the State's case has been proved. That deputy, later that day, or on another day, can be the Board's prosecutor. The end result is that the same people who decide to prosecute the case also vote on guilt or innocence. The likelihood of prevailing on the merits is nil. In a civil courtroom, however, defendant physicians win over 80 percent of the verdicts.

Let us now examine the three dramatic instances where issues of malpractice went before the Board. The first case involved a physician who altered a patient's record. He was charged with gross neglect. No demonstrated injury to the patient was established. The hearing officer, a retired appellate judge, ruled the case should be dismissed because altering a record did not constitute negligence, and no injury resulted. The State Board reversed and suspended the doctor's license. There was no civil malpractice case involved.

The second situation arose initially as a civil malpractice suit. MIIENJ was the insurer. The allegation centered on a tight cast. There was no permanent damage. MIIENJ had an orthopaedic panel review the case. It determined the matter was "medically defensible." The State Board subsequently charged the doctor with gross malpractice. The Board action eventually was settled by a $500 fine, and no admission of liability. The civil malpractice file was closed at no payment.

The third case involved the medical director of a county geriatric facility. He was charged with gross malpractice because he did not hospitalize six elderly senile patients that had acute disease. The State Board found him guilty of simple negligence by exercising poor judgment in two of the cases. They then said simple negligence, twice committed in a career, equals repeated negligence. No civil malpractice was asserted.

So you see you can be brought before the Board for "gross neglect," or repetitious negligence if someone sues you, or if they do not. The concept of negligence before the Board is different from civil courts.

It seems highly unlikely that any doctor who has been reported twice by a malpractice carrier will escape a Board action unless there is a reversal of the established trend. In looking at the issue of gross neglect consider that the Board currently is prosecuting a surgeon who failed to secure a specific written consent from a patient for radical breast surgery. The physician did break scrub, and secure the consent of the husband. There is no question the patient had infiltrating stage two metastatic carcinoma. There is a collateral civil malpractice claim. I find it difficult to accept that the State Board should be involved in this case at all. Clearly it could hold any Board action in abeyance pending completion of the civil suit.

In conclusion, I feel that unless the State Board of Medical Examiners changes its position, the number of cases before it will multiply dramatically. Clever plaintiff's attorneys will use the Board for "cheap discovery" and "adverse expert reports." The potential for whipsawing is present, and the result could be devastating. The situation requires monitoring. We will have a better view of the impact in two or three years.

DID YOU KNOW . . .

Once final disciplinary action was taken by the State Board of Medical Licensure, any complaint, report, memorandum, or letter made part of the record in such action must be made available for inspection, a Kentucky appellate court ruled? A newspaper reporter requested access to certain material relating to complaints filed against state physicians. The Board said that the reporter could look only at those files where formal complaints had been filed by the Board. The reporter and his newspaper filed suit claiming that the limited access permitted by the Board was unlawful. The court found that the Board must permit access to the appropriate records, but that the Board's response was not a willful violation of the Open Records Act. The appellate court affirmed (Kentucky State Board of Medical Licensure *v* Courier-Journal and Louisville Times Company, 663 S.W.2d 953, Ky. Ct. of App., Oct. 14, 1983) (The Citation, Vol. 50, No. 1, October 15, 1984).

A New York research service claims it dramatically has increased the armamentarium malpractice lawyers can use against you? It says its computerized data-retrieval service not only can provide attorneys with all the standard case law needed to successfully conduct a case but can tell the attorney his chances for winning—based on the data available, the disposition of the courts in his locality, and the recent history of the defendants. For an additional fee, the company will research the publishing history of any medical specialist scheduled to testify. Although the service was originally intended for plaintiff's lawyers, the company says, insurers are showing increased interest in using it to shore up their defense (*Medical Economics*, October 15, 1984).

Doctors in Britain, not unlike their U.S. counterparts, are concerned about rising liability premiums, increases in the severity of malpractice awards, and the length of time it takes to settle claims. But if you live in high-risk states such as Florida or New York, you may have trouble working up much sympathy for their plight. Next year, they'll pay only 9 percent more for malpractice coverage. The British Medical Association blames the increase on higher awards, estimating that they're up nearly 40 percent from last year (*Medical Economics*, October 15, 1984).

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See following page for brief summary of prescribing information.

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INDICATIONS AND USAGE: SORBITRATE (isosorbide dinitrate) is indicated for the treatment and prevention of angina pectoris. All dosage forms of isosorbide dinitrate may be used prophylactically to decrease frequency and severity of anginal attacks and can be expected to decrease the need for sublingual nitroglycerin.

The sublingual and chewable forms of the drug are indicated for acute prophylaxis of angina pectoris when taken a few minutes before situations likely to provoke anginal attacks. Because of a slower onset of effect, the oral forms of isosorbide dinitrate are not indicated for acute prophylaxis.

CONTRAINDICATIONS: SORBITRATE is contraindicated in patients who have shown purported hypersensitivity or idiosyncrasy to it or other nitrates or nitrites. Epinephrine and related compounds are ineffective in reversing the severe hypotensive events associated with overdose and are contraindicated in this situation.

WARNINGS: The benefits of SORBITRATE during the early days of an acute myocardial infarction have not been established. If one elects to use organic nitrates in early infarction, hemodynamic monitoring and frequent clinical assessment should be used because of the potential deleterious effects of hypotension.

PRECAUTIONS: General: Severe hypotensive response, particularly with upright posture, may occur with even small doses of SORBITRATE. The drug should therefore be used with caution in subjects who may have blood volume depletion from diuretic therapy or in subjects who have low systolic blood pressure (eg, below 90 mmHg). Paradoxical bradycardia and increased angina pectoris may accompany nitrate-induced hypotension. Nitrate therapy may aggravate the angina caused by hypertrophic cardiomyopathy.

Marked symptomatic, orthostatic hypotension has been reported when calcium channel blockers and organic nitrates were used in combination. Dose adjustment of either class of agents may be necessary.

Tolerance to this drug and cross-tolerance to other nitrates and nitrites may occur. Tolerance to the vascular and antianginal effects of isosorbide dinitrate or nitroglycerin has been demonstrated in clinical trials, experience through occupational exposure, and in isolated tissue experiments in the laboratory. The importance of tolerance to the appropriate use of isosorbide dinitrate in the management of patients with angina pectoris has not been determined. However, one clinical trial using treadmill exercise tolerance (as an end point) found an 8-hour duration of action of oral isosorbide dinitrate following the first dose (after a 2-week placebo washout) and only a 2-hour duration of effect of the same dose after 1 week of repetitive dosing at conventional dosing intervals. On the other hand, several trials have been able to differentiate isosorbide dinitrate from placebo after 4 weeks of therapy and, in open trials, an effect seems detectable for as long as several months.

Tolerance clearly occurs in industrial workers continuously exposed to nitroglycerin. Moreover, physical dependence also occurs since chest pain, acute myocardial infarction, and even sudden death have occurred during temporary withdrawal of nitroglycerin from the workers. In clinical trials in angina patients, there are reports of anginal attacks being more easily provoked and of rebound in the hemodynamic effects soon after nitrate withdrawal. The relative importance of these observations to the routine, clinical use of isosorbide dinitrate is not known. However, it seems prudent to gradually withdraw patients from isosorbide dinitrate when the therapy is being terminated, rather than stopping the drug abruptly.

Information for Patients: Headache may occur during initial therapy with SORBITRATE. Headache is usually relieved by the use of standard headache remedies or by lowering the dose and tends to disappear after the first week or two of use.

Drug Interactions: Alcohol may enhance any marked sensitivity to the hypotensive effect of nitrates.

Isosorbide dinitrate acts directly on vascular smooth muscle; therefore, any other agent that depends on vascular smooth muscle as the final common path can be expected to have decreased or increased effect depending on the agent.

Carcinogenesis, Mutagenesis, Impairment of Fertility: No long-term studies in animals have been performed to evaluate the carcinogenic potential of this drug. A modified two-litter reproduction study in rats fed isosorbide dinitrate at 25 or 100 mg/kg/day did not reveal any effects on fertility or gestation or any remarkable gross pathology in any parent or offspring fed isosorbide dinitrate as compared with rats fed a basal-controlled diet.

Pregnancy Category C: Isosorbide dinitrate has been shown to cause a dose-related increase in embryotoxicity (increase in mummified pups) in rabbits at oral doses 35 and 150 times the maximum recommended human daily dose. There are no adequate and well-controlled studies in pregnant women. SORBITRATE should be used during pregnancy only if the potential benefit justifies the potential risk to the fetus.

Nursing Mothers: It is not known whether this drug is excreted in human milk. Because many drugs are excreted in human milk, caution should be exercised when SORBITRATE is administered to a nursing woman.

Pediatric Use: The safety and effectiveness of SORBITRATE in children has not been established.

ADVERSE REACTIONS: Adverse reactions, particularly headache and hypotension, are dose-related. In clinical trials at various doses, the following have been observed:

Headache is the most common (reported incidence varies widely, apparently being dose-related, with an average occurrence of about 25%) adverse reaction and may be severe and persistent. Cutaneous vasodilation with flushing may occur. Transient episodes of dizziness and weakness, as well as other signs of cerebral ischemia associated with postural hypotension, may occasionally develop (the incidence of reported symptomatic hypotension ranges from 2% to 36%). An occasional individual will exhibit marked sensitivity to the hypotensive effects of nitrates and severe responses (nausea, vomiting, weakness, restlessness, pallor, perspiration, and collapse) may occur even with the usual therapeutic dose. Drug rash and/or exfoliative dermatitis may occasionally occur. Nausea and vomiting appear to be uncommon. Case reports of clinically significant methemoglobinemia are rare at conventional doses of organic nitrates. The formation of methemoglobin is dose-related and, in the case of genetic abnormalities of hemoglobin that favor methemoglobin formation, even conventional doses of organic nitrate could produce harmful concentrations of methemoglobin.

DOSAGE AND ADMINISTRATION: For the treatment of angina pectoris, the usual starting dose for sublingual SORBITRATE is 2.5 to 5 mg; for chewable tablets, 5 mg; for oral (swallowed) tablets, 5 to 20 mg; and for controlled-release forms, 40 mg.

SORBITRATE should be titrated upward until angina is relieved or side effects limit the dose. In ambulatory patients, the magnitude of the incremental dose increase should be guided by measurements of standing blood pressure.

The initial dosage of sublingual or chewable SORBITRATE for prophylactic therapy in angina pectoris patients is generally 5 or 10 mg every 2 to 3 hours. Adequate controlled clinical studies demonstrating the effectiveness of chronic maintenance therapy with these dosage forms have not been reported.

SORBITRATE in oral doses of 10 to 40 mg given every 6 hours or in oral controlled-release doses of 40 to 80 mg given every 8 to 12 hours is generally recommended. The extent to which development of tolerance should modify the dosage program has not been defined. *The oral controlled-release forms of isosorbide dinitrate should not be chewed.*

DOSAGE FORMS AVAILABLE: Sublingual Tablets (2.5, 5, 10 mg); Chewable Tablets (5, 10 mg); Oral Tablets (5, 10, 20, 30, 40 mg); Sustained Action Tablets (40 mg).

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EDITORIAL

Board of Trustees' Position on "Physician DRGs"

The Board of Trustees of the Medical Society of New Jersey has taken a firm position on the DRG principle on reimbursement of physicians' services.

With all the rumors, threats, and possibilities, if not probabilities, of the application of the DRG principle on reimbursement of physicians' services, the Board of Trustees of the Medical Society of New Jersey has taken a position on the matter. Out of respect for the AMA, they waited until the outcome of the recent House of Delegates meeting in Hawaii was completed to see if that organization expressed an official opinion on the matter. They did not, so it is imperative that New Jersey and elsewhere be aware of the official position of the leaders of organized medicine of our state.

The following statement was prepared by Paul J. Hirsch, M.D., and presented to the Board of Trustees, which approved it and adopted it as its own:

> The Medical Society of New Jersey, on behalf of our patients and the people of New Jersey, strongly opposes the so-called "Physician DRG" proposal, which would, in effect, ration health care to our patients. The reasons for our opposition include the following:
>
> The DRG concept, as presently utilized by the federal government for prospective pricing under Medicare, currently is under evaluation by the Prospective Payment Assessment Commission (PROPAC), and has not been proved to be a satisfactory or effective tool.
>
> The DRG system has a number of incentives which are of concern to us, and these incentives would carry over into the "Physician DRG" proposal. Included are: an incentive to admit unnecessarily; an incentive to decrease or to limit (ration) care to the patient, per admission; an incentive to decrease length of stay and to discharge early; an incentive to readmit following premature discharge; an incentive to shift services to an outpatient basis; an incentive to avoid "unprofitable" patients. This combination of incentives may or may not eventually prove to save money; the potential for danger to our patients is obvious.
>
> Under the hospital DRG program, the physician is the patient's advocate or protector against the system. If the physician is drawn tightly into the system by the "Physician DRG" proposal, a measure of protection for the patient may be lost.
>
> The so-called "Physician DRG" program provides a strong disincentive to the use of consultant and specialist medical care when necessary; and a disincentive to the involvement of the patient's personal physician when hospitalized by another physician. These factors would decrease the quality of care for our patients.
>
> This proposal, which would in effect "cap" or limit the medical care for a given patient with a given diagnosis, would be detrimental to the health of our patients.

The Medical Society of New Jersey recognizes the need to control the cost of health care, and supports this concept. However, we will continue to oppose any such proposed program which will limit the quality of care for our patients or our patients' freedom of choice in obtaining treatment and consultation from the physicians of their choice. A.K.

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HOSPITAL GOVERNING BOARDS*

Personality and Staff Privileges

JAMES E. GEORGE, M.D., J.D.

May admission to a hospital medical staff legally be conditioned on a physician's ability to work with others?

Federal and state law developments, as well as economic climate, profoundly have affected the individual practicing physician and his relationships with the hospital and other members of the medical staff. Increased pressures upon the medical staff to assess the performance of physicians may create a climate of friction and conflict among physicians and between the medical staff and the hospital.

In an attempt to maintain quality of care responsibilities, some hospitals and medical staffs have adopted bylaws which require applicants for membership to the medical staff to meet certain subjective requirements in addition to professional competency. One of the most controversial requirements is the ability to get along with other physicians or hospital personnel. May admission to a hospital medical staff legally be conditioned on a physician's ability to work with others?

It is clear that physicians may not be excluded from the medical staff on the basis of arbitrary or discriminatory standards. Nor can a physician be excluded without his being offered the opportunity to respond to charges against him in a fair hearing. The question of whether or not a physician's disruptive personality or his inability to get along with others is a valid criterion in and of itself for denial or revocation of medical staff privileges is a complex question not yet fully resolved by the courts in New Jersey.

Courts in jurisdictions that have been presented with this question have considered several factors. They have asked whether the alleged inability of the physician to work with others has been documented adequately through a substantial inquiry and whether the physician has been provided an opportunity to confront the charges. Other courts have asked whether the physician's disruptive personality or inability to work along with others represents a real and substantial danger that patient care might be affected adversely if he were admitted to medical staff membership.

In a 1967 case reported at 95 N.J. Super. 418, the New Jersey Superior Court, Appellate Division, was presented with the question of whether a physician could be denied admission to the medical staff because of his personality problems. In that case, the hospital ostensibly denied an application to the medical staff on grounds that the applicant already had privileges at two other area hospitals. The rejected physician then sued the hospital.

When the case reached the appellate level, the court found that the "real reason" the physician's application was denied was because of this personality problem at other hospitals where he had privileges. The court noted that the defendant hospital's bylaws did not have a provision which made the ability to work with others a condition of membership. Nevertheless, the court reviewed the testimony of a physician hospital administrator who had been offered by the hospital as an expert witness. The expert testified that three factors were to be considered in evaluating an applicant for medical staff privileges: professional competency, compliance with the code of ethics, and the right character. Describing the third factor, the physician said it meant the "capacity to cooperate... willingness to abide by a staff organization... a cooperative citizen in the medical community."

On review of this testimony, the court cautioned that "conscientious physicians should not be deterred from speaking out against abuses in hospital practices by the fear that their criticisms to improve the quality of patient care may result in their being denied staff privileges in some other hospital solely by reason thereof."

The court concluded that the hospital's board reasonably may consider the factor of prospective disharmony in a staff privileges decision. However, the court also held that the hospital owed a duty to the applicant to conduct a substantial inquiry into his fitness to serve on the medical staff. Moreover, the hospital also must provide the applicant with a fair oppportunity to present his side of the issue.

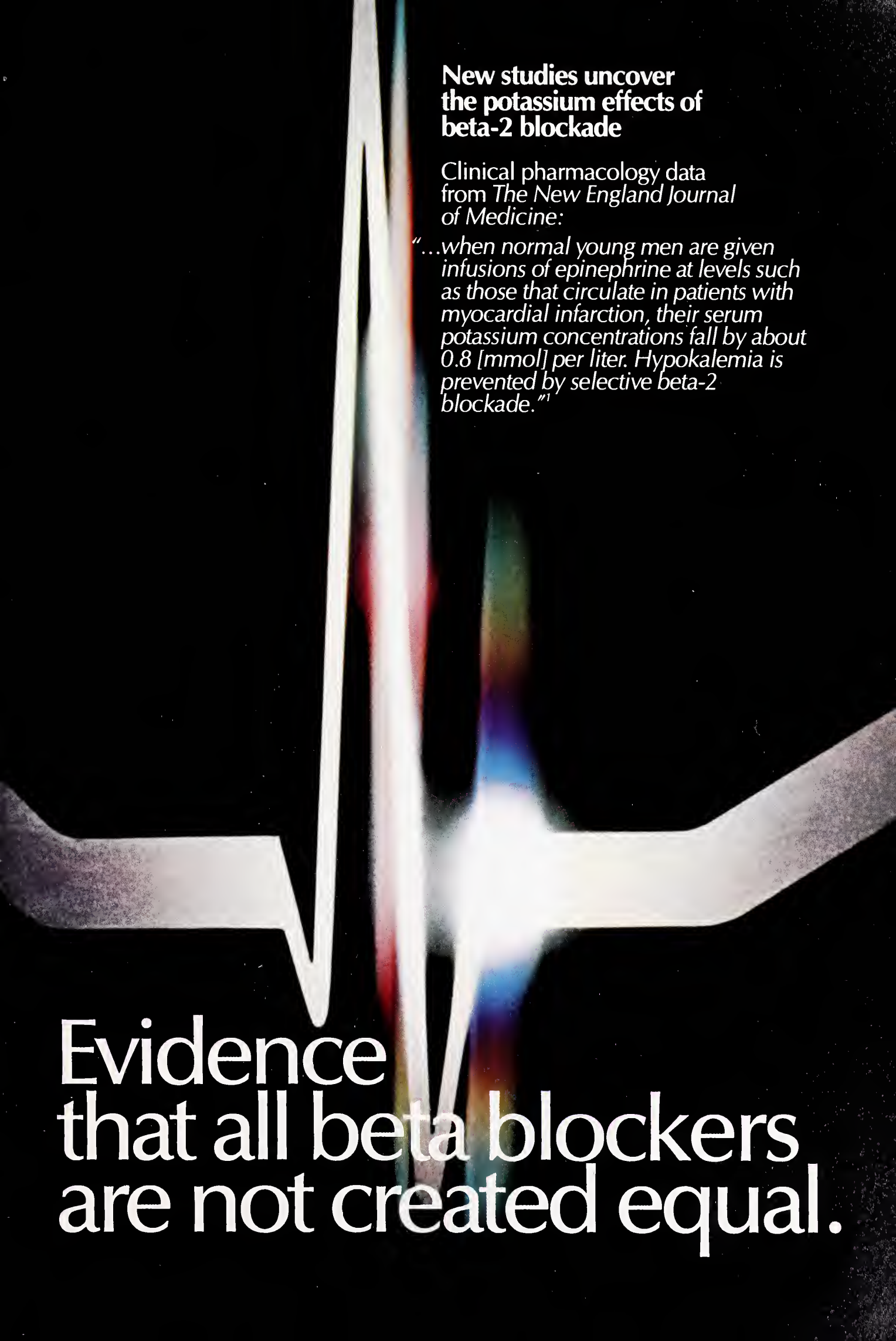
In a 1980 California Supreme Court decision, reported at 27 Cal. 3d 614, the Court held that a substantial inquiry into the personality problem and an opportunity to be heard were not a sufficient basis upon which to deny an applicant staff privileges. The Court held that the hospital must be able to demonstrate a reasonable nexus between the standards of medical staff membership and the provision of quality patient care. The Court said, "The fact that a physician seeking admission to staff membership is shown to manifest

*The material for this column is coedited by Arthur Krosnick, M.D., Editor, *The Journal*, MSNJ; Vincent A. Maressa, J.D., Executive Director, MSNJ; and James E. George, M.D., J.D., Director of Professional Liability.

characteristics of personality which other staff members or administrators find personally disagreeable or annoying is not in itself enough, in our view, to justify rejection. Rejection on this basis can be permitted . . . only when it can be shown that the applicant's ability to work with others in the hospital setting is limited in a manner which would pose a realistic and specific threat to the quality of patient care to be afforded to patients at the institution."

SUMMARY

New Jersey law permits hospitals and medical staffs to consider a physician's personality, temperament, and ability and willingness to work with others in staff membership decisions. However, the courts will require that careful, accurate documentation of prior episodes of disharmony based on a substantial inquiry be made along with the provision of an opportunity for the applicant to fairly respond to the charges. In its 1967 decision the New Jersey court said, "To accept the personality evaluation of a doctor by those whom he may have criticized, without hearing the other side of the story, is not an adequate fulfillment of the fiduciary obligation owed in passing upon an application for medical staff membership." Whether the law of New Jersey will evolve to further require a showing that the quality of patient care be specifically threatened if the applicant were admitted, remains to be seen.



New studies uncover the potassium effects of beta-2 blockade

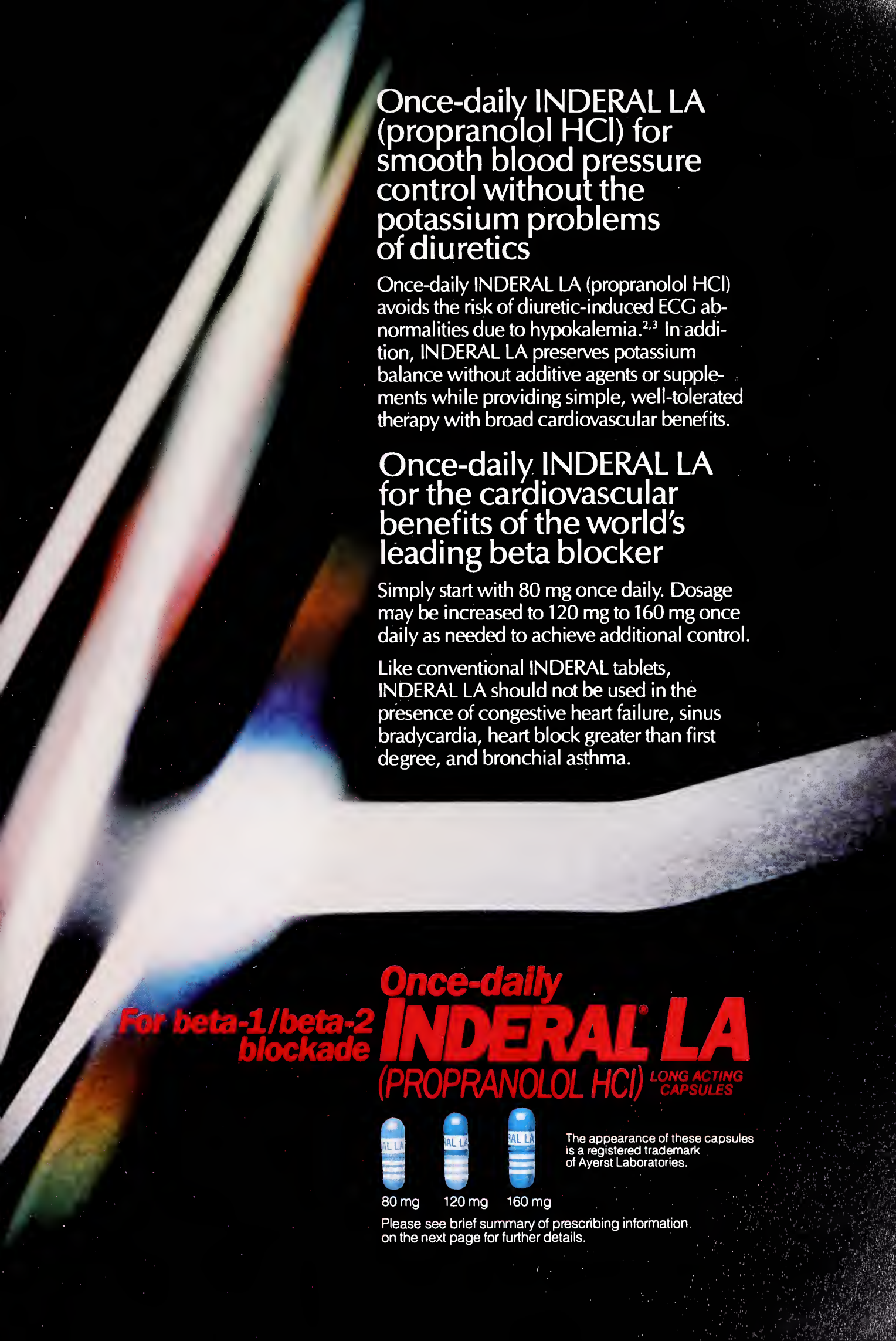
Clinical pharmacology data from *The New England Journal of Medicine*:

"...when normal young men are given infusions of epinephrine at levels such as those that circulate in patients with myocardial infarction, their serum potassium concentrations fall by about 0.8 [mmol] per liter. Hypokalemia is prevented by selective beta-2 blockade."[1]

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INDERAL LA should not be considered a simple mg for mg substitute for conventional propranolol and the blood levels achieved do not match (are lower than) those of two to four times daily dosing with the same dose. When changing to INDERAL LA from conventional propranolol, a possible need for retitration upwards should be considered especially to maintain effectiveness at the end of the dosing interval. In most clinical settings, however, such as hypertension or angina where there is little correlation between plasma levels and clinical effect, INDERAL LA has been therapeutically equivalent to the same mg dose of conventional INDERAL as assessed by 24-hour effects on blood pressure and on 24-hour exercise responses of heart rate, systolic pressure and rate pressure product. INDERAL LA can provide effective beta blockade for a 24-hour period.

The mechanism of the antihypertensive effect of INDERAL has not been established. Among the factors that may be involved in contributing to the antihypertensive action are (1) decreased cardiac output, (2) inhibition of renin release by the kidneys, and (3) diminution of tonic sympathetic nerve outflow from vasomotor centers in the brain. Although total peripheral resistance may increase initially, it readjusts to or below the pretreatment level with chronic use. Effects on plasma volume appear to be minor and somewhat variable. INDERAL has been shown to cause a small increase in serum potassium concentration when used in the treatment of hypertensive patients.

In angina pectoris, propranolol generally reduces the oxygen requirement of the heart at any given level of effort by blocking the catecholamine-induced increases in the heart rate, systolic blood pressure, and the velocity and extent of myocardial contraction. Propranolol may increase oxygen requirements by increasing left ventricular fiber length, end diastolic pressure and systolic ejection period. The net physiologic effect of beta-adrenergic blockade is usually advantageous and is manifested during exercise by delayed onset of pain and increased work capacity.

In dosages greater than required for beta blockade, INDERAL also exerts a quinidine-like or anesthetic-like membrane action which affects the cardiac action potential. The significance of the membrane action in the treatment of arrhythmias is uncertain.

The mechanism of the antimigraine effect of propranolol has not been established. Beta-adrenergic receptors have been demonstrated in the pial vessels of the brain.

Beta receptor blockade can be useful in conditions in which, because of pathologic or functional changes, sympathetic activity is detrimental to the patient. But there are also situations in which sympathetic stimulation is vital. For example, in patients with severely damaged hearts, adequate ventricular function is maintained by virtue of sympathetic drive which should be preserved. In the presence of AV block, greater than first degree, beta blockade may prevent the necessary facilitating effect of sympathetic activity on conduction. Beta blockade results in bronchial constriction by interfering with adrenergic bronchodilator activity which should be preserved in patients subject to bronchospasm.

Propranolol is not significantly dialyzable.
INDICATIONS AND USAGE. Hypertension: INDERAL LA is indicated in the management of hypertension; it may be used alone or used in combination with other antihypertensive agents, particularly a thiazide diuretic. INDERAL LA is not indicated in the management of hypertensive emergencies.

Angina Pectoris Due to Coronary Atherosclerosis: INDERAL LA is indicated for the long-term management of patients with angina pectoris.

Migraine: INDERAL LA is indicated for the prophylaxis of common migraine headache. The efficacy of propranolol in the treatment of a migraine attack that has started has not been established and propranolol is not indicated for such use.

Hypertrophic Subaortic Stenosis: INDERAL LA is useful in the management of hypertrophic subaortic stenosis, especially for treatment of exertional or other stress-induced angina, palpitations, and syncope. INDERAL LA also improves exercise performance. The effectiveness of propranolol hydrochloride in this disease appears to be due to a reduction of the elevated outflow pressure gradient which is exacerbated by beta-receptor stimulation. Clinical improvement may be temporary.
CONTRAINDICATIONS. INDERAL is contraindicated in 1) cardiogenic shock; 2) sinus bradycardia and greater than first degree block; 3) bronchial asthma; 4) congestive heart failure (see WARNINGS) unless the failure is secondary to a tachyarrhythmia treatable with INDERAL.
WARNINGS. CARDIAC FAILURE: Sympathetic stimulation may be a vital component supporting circulatory function in patients with congestive heart failure, and its inhibition by beta blockade may precipitate more severe failure. Although beta blockers should be avoided in overt congestive heart failure, if necessary, they can be used with close follow-up in patients with a history of failure who are well compensated and are receiving digitalis and diuretics. Beta-adrenergic blocking agents do not abolish the inotropic action of digitalis on heart muscle.

IN PATIENTS WITHOUT A HISTORY OF HEART FAILURE, continued use of beta blockers can, in some cases, lead to cardiac failure. Therefore, at the first sign or symptom of heart failure, the patient should be digitalized and/or treated with diuretics, and the response observed closely, or INDERAL should be discontinued (gradually, if possible).

IN PATIENTS WITH ANGINA PECTORIS, there have been reports of exacerbation of angina and, in some cases, myocardial infarction, following abrupt discontinuance of INDERAL therapy. Therefore, when discontinuance of INDERAL is planned the dosage should be gradually reduced over at least a few weeks, and the patient should be cautioned against interruption or cessation of therapy without the physician's advice. If INDERAL therapy is interrupted and exacerbation of angina occurs, it usually is advisable to reinstitute INDERAL therapy and take other measures appropriate for the management of unstable angina pectoris. Since coronary artery disease may be unrecognized, it may be prudent to follow the above advice in patients considered at risk of having occult atherosclerotic heart disease who are given propranolol for other indications.

Nonallergic Bronchospasm (e.g., chronic bronchitis, emphysema)— PATIENTS WITH BRONCHOSPASTIC DISEASES SHOULD IN GENERAL NOT RECEIVE BETA BLOCKERS. INDERAL should be administered with caution since it may block bronchodilation produced by endogenous and exogenous catecholamine stimulation of beta receptors.

MAJOR SURGERY: The necessity or desirability of withdrawal of beta-blocking therapy prior to major surgery is controversial. It should be noted, however, that the impaired ability of the heart to respond to reflex adrenergic stimuli may augment the risks of general anesthesia and surgical procedures.

INDERAL (propranolol HCl), like other beta blockers, is a competitive inhibitor of be receptor agonists and its effects can be reversed by administration of such agents, e dobutamine or isoproterenol. However, such patients may be subject to protracted sev hypotension. Difficulty in starting and maintaining the heartbeat has also been reported w beta blockers.

DIABETES AND HYPOGLYCEMIA: Beta-adrenergic blockade may prevent the a pearance of certain premonitory signs and symptoms (pulse rate and pressure changes) acute hypoglycemia in labile insulin-dependent diabetes. In these patients, it may be m difficult to adjust the dosage of insulin.

THYROTOXICOSIS: Beta blockade may mask certain clinical signs of hyperthyroidis Therefore, abrupt withdrawal of propranolol may be followed by an exacerbation of sympto of hyperthyroidism, including thyroid storm. Propranolol does not distort thyroid function tes

IN PATIENTS WITH WOLFF-PARKINSON-WHITE SYNDROME, several cases have be reported in which, after propranolol, the tachycardia was replaced by a severe bradycar requiring a demand pacemaker. In one case this resulted after an initial dose of 5 r propranolol.
PRECAUTIONS. *General:* Propranolol should be used with caution in patients with impair hepatic or renal function. INDERAL (propranolol HCl) is not indicated for the treatment hypertensive emergencies.

Beta adrenoreceptor blockade can cause reduction of intraocular pressure. Patie should be told that INDERAL may interfere with the glaucoma screening test. Withdrawal m lead to a return of increased intraocular pressure.

Clinical Laboratory Tests: Elevated blood urea levels in patients with severe heart disea elevated serum transaminase, alkaline phosphatase, lactate dehydrogenase.

DRUG INTERACTIONS: Patients receiving catecholamine-depleting drugs such as res pine should be closely observed if INDERAL is administered. The added catecholamin blocking action may produce an excessive reduction of resting sympathetic nervous activ which may result in hypotension, marked bradycardia, vertigo, syncopal attacks, or orthosta hypotension.

Carcinogenesis, Mutagenesis, Impairment of Fertility: Long-term studies in animals ha been conducted to evaluate toxic effects and carcinogenic potential. In 18-month studies both rats and mice, employing doses up to 150 mg/kg/day, there was no evidence of significa drug-induced toxicity. There were no drug-related tumorigenic effects at any of the dosa levels. Reproductive studies in animals did not show any impairment of fertility that w attributable to the drug.

Pregnancy: Pregnancy Category C. INDERAL has been shown to be embryotoxic animal studies at doses about 10 times greater than the maximum recommended human do

There are no adequate and well-controlled studies in pregnant women. INDERAL shou be used during pregnancy only if the potential benefit justifies the potential risk to the fet

Nursing Mothers: INDERAL is excreted in human milk. Caution should be exercised wh INDERAL is administered to a nursing woman.

Pediatric Use: Safety and effectiveness in children have not been established.
ADVERSE REACTIONS. Most adverse effects have been mild and transient and ha rarely required the withdrawal of therapy.

Cardiovascular: bradycardia; congestive heart failure; intensification of AV block; hyp tension; paresthesia of hands; thrombocytopenic purpura; arterial insufficiency, usually of t Raynaud type.

Central Nervous System: lightheadedness; mental depression manifested by insomn lassitude, weakness, fatigue; reversible mental depression progressing to catatonia; visu disturbances; hallucinations; an acute reversible syndrome characterized by disorientation time and place, short-term memory loss, emotional lability, slightly clouded sensorium, a decreased performance on neuropsychometrics.

Gastrointestinal: nausea, vomiting, epigastric distress, abdominal cramping, diarrhe constipation, mesenteric arterial thrombosis, ischemic colitis.

Allergic: pharyngitis and agranulocytosis, erythematous rash, fever combined with achi and sore throat, laryngospasm and respiratory distress.

Respiratory: bronchospasm.

Hematologic: agranulocytosis, nonthrombocytopenic purpura, thrombocytopen purpura.

Auto-Immune: In extremely rare instances, systemic lupus erythematosus has be reported.

Miscellaneous: alopecia, LE-like reactions, psoriasiform rashes, dry eyes, male imp tence, and Peyronie's disease have been reported rarely. Oculomucocutaneous reactio involving the skin, serous membranes and conjunctivae reported for a beta blocker (practol have not been associated with propranolol.
DOSAGE AND ADMINISTRATION. INDERAL LA provides propranolol hydrochloride in sustained-release capsule for administration once daily. If patients are switched from INDER tablets to INDERAL LA capsules, care should be taken to assure that the desired therapeut effect is maintained. INDERAL LA should not be considered a simple mg for mg substitute f INDERAL. INDERAL LA has different kinetics and produces lower blood levels. Retitration m be necessary especially to maintain effectiveness at the end of the 24-hour dosing interv

HYPERTENSION—*Dosage must be individualized.* The usual initial dosage is 80 m INDERAL LA once daily, whether used alone or added to a diuretic. The dosage may b increased to 120 mg once daily or higher until adequate blood pressure control is achieve The usual maintenance dosage is 120 to 160 mg once daily. In some instances a dosage of 6 mg may be required. The time needed for full hypertensive response to a given dosage variable and may range from a few days to several weeks.

ANGINA PECTORIS—*Dosage must be individualized.* Starting with 80 mg INDERAL L once daily, dosage should be gradually increased at three to seven day intervals until optimu response is obtained. Although individual patients may respond at any dosage level, th average optimum dosage appears to be 160 mg once daily. In angina pectoris, the value ar safety of dosage exceeding 320 mg per day have not been established.

If treatment is to be discontinued, reduce dosage gradually over a period of a few week (see WARNINGS).

MIGRAINE—*Dosage must be individualized.* The initial oral dose is 80 mg INDERAL L once daily. The usual effective dose range is 160-240 mg once daily. The dosage may b increased gradually to achieve optimum migraine prophylaxis. If a satisfactory response is n obtained within four to six weeks after reaching the maximum dose, INDERAL LA therap should be discontinued. It may be advisable to withdraw the drug gradually over a period several weeks.

HYPERTROPHIC SUBAORTIC STENOSIS—80-160 mg INDERAL LA once daily.

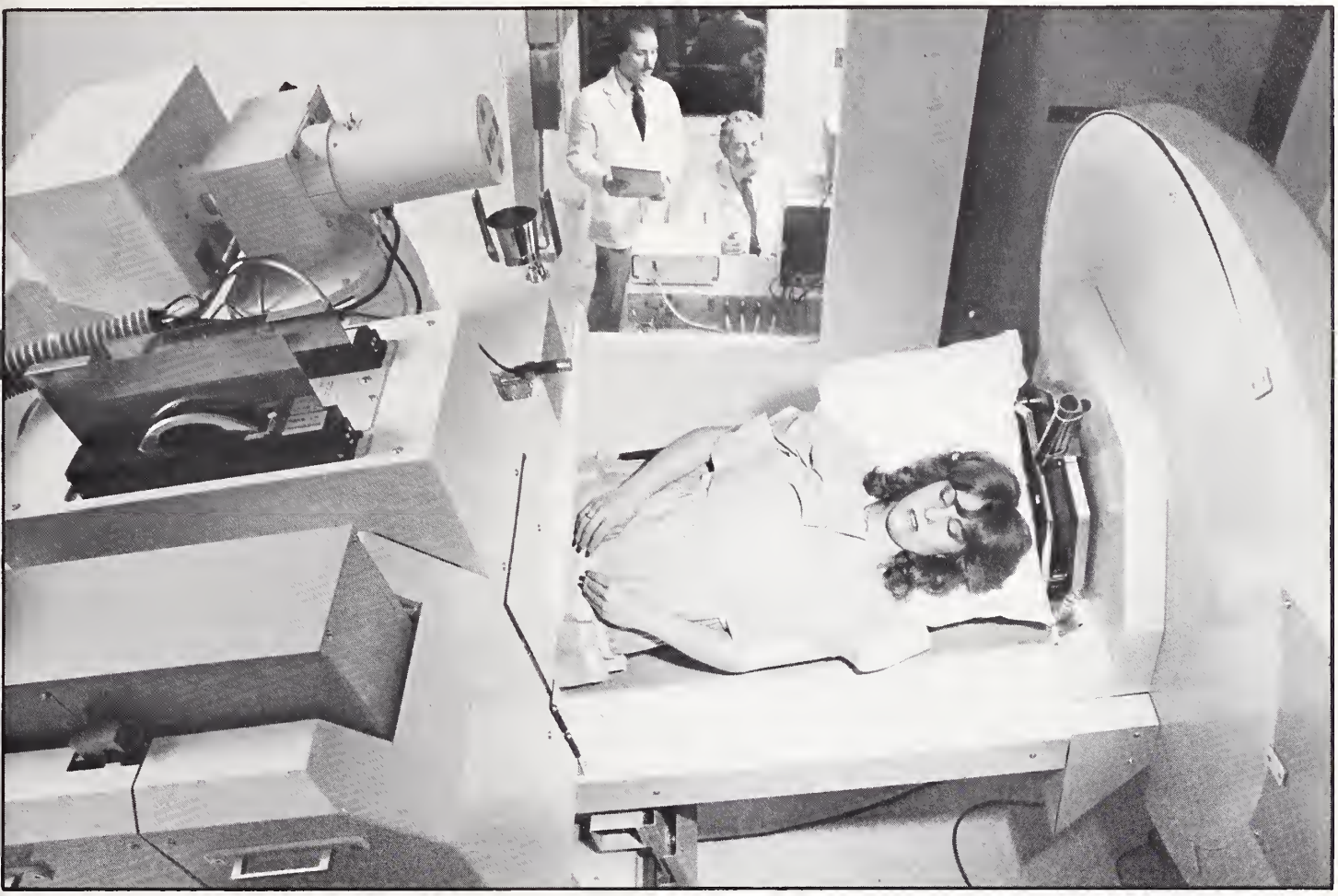
PEDIATRIC DOSAGE—At this time the data on the use of the drug in this age group are to limited to permit adequate directions for use.
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ETHICS AND TECHNOLOGY

By Francis P. Chinard, M.D.*

This essay is an overview of some of the current moral and ethical problems of the practice of medicine in the 1980s. The accrued responsibilities that confront the individual physician and the medical profession as a whole result from the technological revolution in medicine and its accelerating rate over the past few years. The effects of this revolution here are considered at three levels of actual or implied contractual obligations: those between society and the medical profession, those between the medical profession as a whole and its individual practitioners, and those between the patient and his or her physician.

THE TECHNOLOGICAL REVOLUTION

The extent of the technological revolution in medicine can be appreciated in several ways. One way is to imagine the limitations on diagnostic and therapeutic modalities if the lights were to go out: no electricity at the outlets.

A few examples will suffice. Electrocardiograms, x-rays of the chest, and laboratory data as could be obtained would be few in number and reduced in accuracy. In hospitals, there would be no monitoring systems in the intensive care units, no ventilators for artificial respiration, and no balloon assist pumps for failing hearts. Many surgical operations still could be

*From the Departments of Medicine and Physiology, UMDNJ-New Jersey Medical School, Newark. Correspondence may be addressed to Dr. F. Chinard, Department of Medicine, MSB I-530, UMDNJ-New Jersey Medical School, 100 Bergen Street, Newark, NJ 07103.

carried out but procedures highly dependent on advanced technology such as heart transplants and open heart surgery would be precluded. The CAT scanners and their successors—the nuclear magnetic resonance machines—would be useless. It would be extremely difficult to carry out the now almost routine procedures of bronchoscopy and sigmoidoscopy. Hemodialysis for patients with kidney disease would not be available. All support procedures such as intravenous feedings, assisted ventilation, even the simple administration of increased oxygen would become much more difficult and would be markedly restricted. Many other examples of the limitations readily would occur to those who provide or have had the benefits of hospital care.

These limitations are indications of the progress that medicine has made and is continuing to make. However, that progress has been at a certain cost to the application of the traditional concept of the patient-physician relationship that many believe to be an essential component of medical care.

This problem is not new. Certain aspects were discussed over 2,000 years ago by Plato in a dialogue[1] which touches on the categories of doctors:

> "Athenian: It's just the same with doctors, you know, when we're ill: one follows one method of treatment, one another. Let's recall the two methods, so that we can make the same request of the legislator that a child might make of its doctor, to treat him as gently as possible. You want an example? Well, we usually speak, I think, of doctors and doctors' assistants, but of course we call the latter 'doctors' too.
> Cleinias: Certainly.
> Athenian: And these 'doctors' (who may be free men or slaves) pick up the skill empirically, by watching and obeying their masters; they've no systematic knowledge such as the free doctors have learned for themselves and pass on to their pupils. You'd agree in putting 'doctors' into these two categories?
> Cleinias: Of course.
> Athenian: Now's here another thing you notice. A state's invalids include not only free men but slaves too, who are almost always treated by other slaves who either rush about on flying visits or wait to be consulted in their surgeries. This kind of doctor never gives any account of the particular illness of the individual slave, or is prepared to listen to one; he simply prescribes what he thinks best in the light of experience, as if he had precise knowledge, and with the self-confidence of a dictator. Then he dashes off on his way to the next slave-patient, and so take off his master's shoulders some of the work of attending the sick. The visits of the free doctor, by contrast, are mostly concerned with treating the illnesses of free men; his method is to construct an empirical case history by consulting the invalid and his friends; in this way he himself learns something from the sick and at the same time he gives the individual patient all the instruction he can. He gives no prescription until he has somehow gained the invalid's consent; then coaxing him into continued co-operation, he tries to complete his restoration to health. Which of the two methods do you think make a doctor a better healer, or a trainer more efficient?"

It is apparent that early on physicians were considered to be of some effectiveness despite the evident limitations on their efficacy and that importance was attached to patient-physician relationships.

That these relationships and even the quality of medical care provided might be subsumed to the physician's achieving affluence has been suggested more than once since Plato's day. Is it proper for physicians to be involved financially in the operation of hospitals, in the activities of pharmaceutical industries, or in commercial laboratories? To what extent are procedures carried out by physicians because they are available and remunerative rather than because they are needed? To what extent does reimbursement of the physician vary with the site of delivery of medical care outside office or hospital and thereby play a role in determining whether a given patient will be hospitalized or not?

Some of these problems may play a major role in patient-physician relationships. The question really is one of trust in the judgment and impartiality of the physician in making recommendations to the patient that are not guided mainly by the physician's pecuniary gain. Beyond the medical profession, there is an array of healers, charlatans, and inspired individuals who may lead the patient away from reality and away from his savings by proposing or urging untested and unproved modalities of treatment. The medical profession itself is not yet completely free of what charitably can be called such enthusiasms. It was much worse at one time.

An important figure in our history, Thomas Jefferson, discussed the impact of fads and theories, unsubstantiated by facts, on the practice of medicine. The following was written about 200 years ago: "I have lived myself to see the disciples of Hoffmann, Boerhaave, Stahl, Cullen, Brown succeed one another like the shifting figures of a magic lantern and their fancies like the dresses of the annual dollbabies of Paris becoming from their novelty the vogue of the day, and yielding to the next novelty their ephemeral favor. The patient, treated on the fashionable theory, sometimes gets well in spite of the medicine. The medicine therefore restored him and the young doctor received new courage to proceed in his bold experiment on the lives of his fellow creatures. I believe we may safely affirm, that the inexperienced and presumptuous band of medical tyros let loose upon the world destroys more of human life in one year than all the Robin Hoods, Cartouches, and Macheaths in a century."

Medicine has made much progress since Jefferson wrote those lines.[2] With the development of anatomy and histology, physiology could provide the basis for an understanding of the interrelations of structure

and function, thus paving the way for pathology. These developments led to what might be called the age of diagnostic medicine culminating in the approach developed by Osler and his associates at McGill and Oxford as well as at Johns Hopkins. The pharmacopeias were cleaned up, useless nostrums were eliminated, and the physician-patient relationship was enhanced with the recognition that inaction was preferable to action that could be harmful. Patients generally do expect physicians to "do something." This is the quick fix or instant gratification syndrome. To explain why it may be better not to interfere with ineffective procedures or medications takes time, patience, and understanding of the natural history of disease processes and patterns. Knowledge of these processes and patterns became an essential part of medicine. Parallel developments in the teaching of medicine were accelerated following the publication of the Flexner report. Proprietary medical schools designed for profit rather than education, with inadequate facilities and marginal faculty, largely were eliminated. Medicine began to take on the characteristics of a science.

Preventive measures became increasingly effective and therapy received a tremendous impetus with the introduction by Ehrlich of synthetic organic compounds for the treatment of syphilis. A further impetus was provided by the introduction of the first of a whole series of synthetic sulfonamides in the later 1930s. Penicillin and other antibiotics, originally produced from living organisms, with their wide ranges of antibacterial activities began, from 1945 on, to have a major effect on the odds for survival in many infectious diseases and, in particular, tuberculosis. We now had added treatment to diagnostic medicine.

This country has the means of providing dialysis treatments to all those needing them at the expense of the taxpayer.

Through the developments in the basic sciences—particularly in biochemistry and what has become molecular biology and the component genetics—more and more has been understood about the bases of disease processes. As knowledge has increased, each major field of medicine has become more complex and more subdivided. In the general field of internal medicine we now have cardiologists, endocrinologists, dermatologists, gastroenterologists, nephrologists, rheumatologists, and others. There are as many subspecialists in surgery and in pediatrics—and the fields have become increasingly complex so that few specialists in one field care to cross into another (and many fear to undertake the care of the patients without a specific diagnosis in their specialty).

Unfortunately, with the subdivisions in medicine, the patients themselves have become subdivided and it is their bits and pieces that generally are dealt with, and with the highest degree of competence by the subspecialists. But, as individuals, the patients feel ignored. It often is the responsibility of the nonspecialist internist to try to stick Humpty Dumpty back together again.

These subdivisions, in a sense, have been necessitated by the complexities of the technological developments which now make possible procedures and modalities of treatment which hardly were conceivable a few decades ago.

Through the use of dialysis machines, we now can provide patients without kidneys with survival and an active life for a signficant number of years. This country and a few others have the means of providing these dialysis treatments to all those needing them at the expense of the general community—in other words, at the expense of the taxpayer. Other countries, e.g. England, limit paid access to dialysis to those 50 years of age or under. Those beyond that cut-off age must fend for themselves: the wealthy can avail themselves of these treatments. We have avoided making that decision here. There are no social or economic judgments in determining entry into a dialysis program. However, if financial exigency necessitates our becoming selective, who is going to make the decisions? And on what basis; with what determinants will the decisions be made? The cost per patient per year is upwards of $15,000 for home dialysis. In 1983, the cost in dialysis centers for 24,000 patients was reported as $2.2 billion. The cost is less if a transplant can be provided but the supply of donor kidneys is limited and complications can require intensive treatment and even periodic return to the dialysis machine.

What happened in this area is the development of contracts between society and the medical profession to deliver a type of management of late renal disease which is to be made available to all regardless of circumstance, financial, social, or ethnic. As physicians we cannot deny a patient access to dialysis. We cannot force this procedure on a patient who does not wish it and we must have consent and indeed cooperation in order to provide it. The patient must be made aware of the limitation of the dialysis procedures and of the complications that may result from its use. But this is no different from what we must do in order to carry out diagnostic and therapeutic procedures for any patient. We must obtain the patient's consent just as we must in any experimental or research study. The contract between the medical profession and society to provide the treatment now has become a contract between the physician and the patient. But the procedure cannot be carried out by force. It can be refused by the patient. Under those circumstances, death in a short time generally is to be expected.

THE PATIENT WHO REFUSES

Can or should the physician intervene without the patient's consent and even against the patient's wishes?

Two examples of situations in which such a question arises follow. The first involves a prisoner on a

hunger strike. The authorities do not want him to die of starvation. He is brought to a hospital because of his weakened condition and because of the possibility that he might be persuaded to accept food. The prisoner is of average intelligence, a high school graduate, and mentally competent. The prison authorities want him to be force fed. The patient refuses. The authorities specifically request the physician in charge to have the patient force fed. What should the physician do? Must he obey the authorities? Does he have either the right or the obligation to force feed the prisoner? Does the prisoner have the right to starve to death?

The physician refused to have the prisoner force fed but did manage to persuade him to take in food voluntarily. The prisoner made a relatively uneventful recovery and was returned to jail.

Was the initial stand of the physician moral and ethical in refusing to force feed the patient? That action would have required the use of tranquilizers, a nasogastric tube, the possibility of aspiration, a risk but a lesser risk than death by starvation. Was the action of the physician moral and ethical in urging and eventually persuading the prisoner to resume voluntarily the intake of food?

The second example is based on the recent press reports of the young woman with cerebral palsy who wishes to starve to death. She has no future and no possibility of independent life. There is no question about her mental competence. Does a physician have the duty to feed this patient against her will? If that is not done the patient's condition will deteriorate to the point where clearly she is about to die. At this stage the patient will be confused and irrational. Can the physician morally and ethically then interfere and bring the patient back? And what if the patient, brought back to consciousness, again refuses to eat?

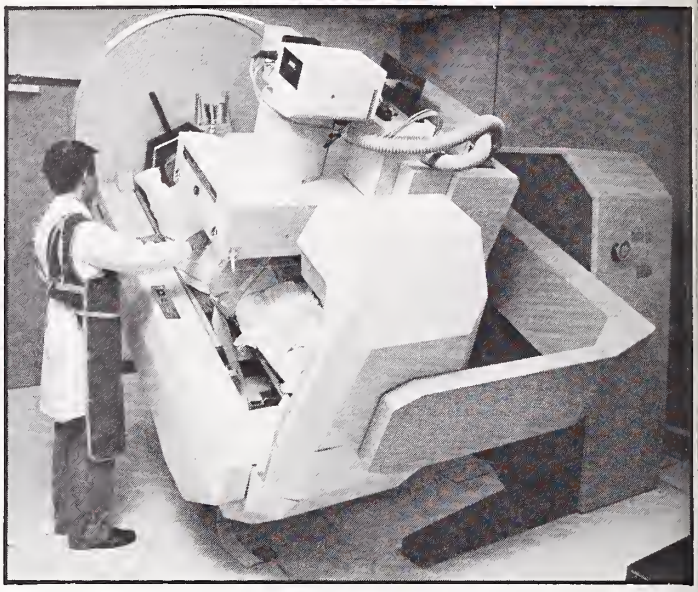
Does a mentally competent person have the right to starve to death? Does a physician have a compelling duty and obligation to interfere? If a court determines that a hospital has the obligation to force feed the actually undertakes that forceful intervention: the physician or the hospital employees?

Does this patient have less right to determine her fate than the patient with renal disease who rejects the benefits that almost certainly would be provided if he were to avail himself of hemodialysis?

MAKING A DECISION

A patient in whom the diagnosis of cancer has been established can make a choice. He can accept treatment, which may be painful and debilitating but may offer the possibility of cure, or he can reject treatment and die, probably sooner, with only the pain of disease but without the disability of treatment. The physician must respect that patient's choice. But the physician must inform the patient of the predictable consequences of the two choices.

In general, physicians recognize the right of patients—or of their close relatives—to make decisions regarding the use of heroic or extraordinary measures in maintaining life. To an increasing degree, for patients not expected to recover, specific verbal instructions (sometimes written orders) are given with respect to the use of resuscitation measures in the event of a cardiac or respiratory arrest. The decision to institute this "no code" or the equivalent "slow code" policy in the case of a given patient should be reached with the understanding of the patient if the patient is competent or else with the understanding of the patient's closest relative.



Written evidence of consent is required before certain diagnostic and therapeutic procedures are carried out. It is reasonable to expect that some written documentation soon will be required for the "no code" policy to be instituted. In the instance of a mentally competent patient, a new form of contract is established between patient and physician. In the instance of a mentally incompetent patient, the contract is between the physician and the family. With such contracts, the burden of the responsibility is shared, the rights of the patient are protected, and explicit orders can be written, thus leaving less room for misunderstanding.

This contract is not one which permits euthanasia, whether desired by the patient or by the family. Nor does this contract permit the disconnection of life-supporting systems solely on the basis of the responsible physician's decision. Euthanasia, in the sense of the deliberate administration of an agent or the use of a procedure, which has no potential for providing benefit to the patient and is given solely to shorten life, is not permitted by the contract between society and the medical profession. Society does permit the administration of potentially lethal agents such as narcotics for the relief of pain but the primary intent is and must be relief of pain. The rejection of euthanasia as differentiated from suicide probably is the only reasonable stand that a civilized society can take. Nazi Germany eliminated thousands of mentally defective, in-

sane, and chronically ill people in hospitals, homes, and custodial institutions before World War II. It requires little effort to recognize the germ of the "final solution" in those actions. Euthanasia, intended to provide relief from suffering, once instituted could be extended to others who were judged noncontributors to the social and economic well-being of society.

Why then is abortion acceptable to most if not all of the medical profession if euthanasia is not? Probably because the rights of women to make decisions on matters which concern them increasingly, if somewhat reluctantly, are recognized but perhaps more because of the expectation that abortions one day will become an unusual and rarely carried out procedure. There are other ways to limit the live birth rate. Prevention of conception rather than interruption of pregnancy would seem by all accounts to be the more rational procedure.

It is clear that technological advances have made abortions on a large scale safe and accessible. The technological advances have not eliminated some serious ethical problems among which are the following: 1) Should the parents of pregnant minors be notified? Must parental consent be obtained where the individual is legally a minor and is seeking an abortion? 2) Does a physician of a faith that does not permit abortion have the right to delay referral to an abortion center of a patient who is seeking an abortion until the state of pregnancy reached precludes a legal abortion?

Granted that a better solution to unwanted pregnancies than abortion is the prevention of conception, more counseling and interaction would be required than now and greater effort in education would be required from physicians.

Abortions are not cheap and can be remunerative both to physicians and to institutions. A sustained educational effort directed at prevention of conception might be cheaper in economic cost and less traumatic in emotional cost than the quick fix offered by an operation. Physicians should not be cast in the role of destroyers of life.

In the sense that abortions are seen as treatment of an established process and are not prevention of pregnancy, they represent the application of what Lewis Thomas has called half-way technology. That evaluation also must apply to dialysis and transplants for renal failure.

Long-term dialysis is coping with an established disaster. Can the disaster that requires dialysis be prevented? Is it possible to arrest the progression of renal disease at an early enough stage so that patients do not require dialysis? Is it possible to find alternates to this highly technical management? And, indeed, is it reasonable to expect that prevention of renal disease can be achieved?

The arrest of progression of renal disease is not yet at hand but, from some preliminary studies, it seems probable that special diets and continuing guidance from appropriately trained and sufficiently interested physicians will be able to achieve that arrest at least in some patients. The prospects look very good indeed. The patients obviously will have to give their consent and will have to be well informed about the potential risk of the various possible courses of action. Early identification of those susceptible to such disorders becomes an appropriate goal for the prevention of some diseases.

CONCLUSION

An optimistic view of the future would suggest that we are approaching in many other areas a period that already has been reached for infectious diseases: prevention. Presently, we are entering a phase in which arrest of progression of disease is being added to the diagnostic and treatment achievements.

How rapidly we move in these directions will depend in part on the education of the public at risk and on implementation of the contractual relationships alluded to: 1) between society and the medical profession with respect to the elimination or decrease of environmental or other risk (including radiation from landfills and from nuclear weapons—as well as smoking, alcohol, and other addictions) and with respect to providing more information to the public about medicine and the functioning of the human body in health and disease; 2) between the medical profession and its constituent members with respect to continuing appraisal of procedures and practices: in other words continued evaluation of what are optimal standards of care and their achievement; and 3) between the patient and the physician in the development and maintenance of a collaborative relationship in which advice, education, and consent or concurrence are emphasized and from which paternalistic and dictatorial approaches are absent. These goals will be difficult to achieve fully and the progress made will depend on two main factors: 1) the interactions of physicians and patients as individuals and as members of society; and 2) the continued support of society for the basic and clinical research necessary to make that progress possible .

These propositions were adumbrated by Jefferson: "It is in this part of medicine that I wish to see a reform, an abandonment of hypothesis for sober facts, the first degree of value being set on clinical observation and the least on visionary theories. I would wish the young practitioner, especially, to have deeply impressed on his mind, the real limits of his art, and that when the state of his patient gets beyond these his office is to be a watchful, but quiet spectator of the operations of nature, giving them fair play by a well-regulated regimen, and by all the aid they can derive from the excitement of good spirits and hope in the patient."

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Contraindications: Severe left ventricular dysfunction (see *Warnings*), hypotension (systolic pressure <90 mm Hg) or cardiogenic shock, sick sinus syndrome (if no pacemaker is present), 2nd- or 3rd-degree AV block. **Warnings:** ISOPTIN should be avoided in patients with severe left ventricular dysfunction (e.g., ejection fraction <30%) or moderate to severe symptoms of cardiac failure. Control milder heart failure with optimum digitalization and/or diuretics before ISOPTIN is used. ISOPTIN may occasionally produce hypotension (usually asymptomatic, orthostatic, mild, and controlled by decrease in ISOPTIN dose). Occasional elevations of liver enzymes have been reported; patients receiving ISOPTIN should have liver enzymes monitored periodically. Patients with atrial flutter/fibrillation and an accessory AV pathway (e.g., W-P-W or L-G-L syndromes) may develop a very rapid ventricular response after receiving ISOPTIN (or digitalis). Treatment is usually D.C.-cardioversion. AV block may occur (3rd degree, 0.8%). Development of marked 1st-degree block or progression to 2nd- or 3rd-degree block requires reduction in dosage or, rarely, discontinuation and institution of appropriate therapy. Sinus bradycardia, 2nd-degree AV block, sinus arrest, pulmonary edema, and/or severe hypotension were seen in some critically ill patients with hypertrophic cardiomyopathy who were treated with ISOPTIN. **Precautions:** ISOPTIN should be given cautiously to patients with impaired hepatic function (in severe dysfunction use about 30% of the normal dose) or impaired renal function, and patients should be monitored for abnormal prolongation of the PR interval or other signs of overdosage. Studies in a small number of patients suggest that concomitant use of ISOPTIN and beta blockers may be beneficial in patients with chronic stable angina. Combined therapy can also have adverse effects on cardiac function. Therefore, until further studies are completed, ISOPTIN should be used alone, if possible. If combined therapy is used, patients should be monitored closely. Combined therapy with ISOPTIN and propranolol should usually be avoided in patients with AV conduction abnormalities and/or depressed left ventricular function or in patients who have also recently received methyldopa. Chronic ISOPTIN treatment increases serum digoxin levels by 50% to 70% during the first week of therapy, which can result in digitalis toxicity. The digoxin dose should be reduced when ISOPTIN is given, and the patient carefully monitored. ISOPTIN may have an additive hypotensive effect in patients receiving blood-pressure-lowering agents. Disopyramide should not be given within 48 hours before or 24 hours after ISOPTIN administration. Until further data are obtained, combined ISOPTIN and quinidine therapy in patients with hypertrophic cardiomyopathy should probably be avoided, since significant hypotension may result. Adequate animal carcinogenicity studies have not been performed. One study in rats did not suggest a tumorigenic potential, and verapamil was not mutagenic in the Ames test. *Pregnancy Category C:* There are no adequate and well-controlled studies in pregnant women. This drug should be used during pregnancy, labor, and delivery only if clearly needed. It is not known whether verapamil is excreted in breast milk; therefore, nursing should be discontinued during ISOPTIN use. **Adverse Reactions:** Hypotension (2.9%), peripheral edema (1.7%), AV block: 3rd degree (0.8%), bradycardia: HR<50/min (1.1%), CHF or pulmonary edema (0.9%), dizziness (3.6%), headache (1.8%), fatigue (1.1%), constipation (6.3%), nausea (1.6%). The following reactions, reported in less than 0.5%, occurred under circumstances where a causal relationship is not certain: confusion, paresthesia, insomnia, somnolence, equilibrium disorders, blurred vision, syncope, muscle cramps, shakiness, claudication, hair loss, maculae, and spotty menstruation. Overall continuation rate of 94.5% in 1,166 patients. **How Supplied:** ISOPTIN (verapamil HCl) is supplied in 80 mg and 120 mg sugar-coated tablets. July 1982 2068

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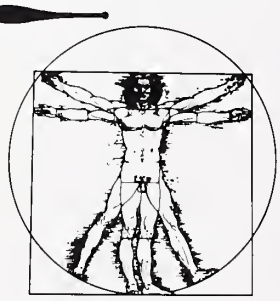
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Three-Year Experience with Gastric Stapling for Morbid Obesity

Robert E. Brolin, M.D., Daniel P. Greenfield, M.D., Karen Kasnetz, R.D., Lynn Clemow, M.A., New Brunswick*

Since March 1981, 56 stapled gastroplasties and 20 gastric bypasses have been performed at Middlesex General-University Hospital with an overall complication rate of 6 percent. At 18 months, 48 percent of gastroplasty patients are within 50 percent of ideal weight. Obesity-related medical problems were improved in 90 percent of patients.

Morbid obesity has been shown to lead to a variety of other health problems including a significantly shortened life span, particularly in young and middle-aged adults.[1] The older morbidly obese frequently are housebound or otherwise incapacitated by the sequelae of diabetes, congestive heart failure, and degenerative arthritis. In addition to the expenses of managing the health-related problems, it is common knowledge that obesity of this degree is associated with a high level of joblessness, personal embarrassment, and frequent discrimination in employment.

Because of the nearly uniform ineffectiveness of nonoperative treatment measures in the morbidly obese, a variety of operations has been devised to induce sustained weight loss in this group of patients.[2,3] Jejunoileal bypass, which once was considered the cornerstone of surgical treatment for morbid obesity, now has been abandoned because of the unacceptably high incidence of severe late complications.[4-6] In 1967, Mason introduced the concept of gastric reduction surgery which induced weight loss by reducing functional gastric capacity by more than 90 percent.[7] Reduced gastric capacity, in combination with a small calibrated gastric outlet, triggers the satiety reflex after consumption of small quantities of solid food. Mason's early gastric reduction procedures were technically difficult to perform and associated with a high incidence of postoperative complications.[8,9] In 1979, Pace and Carey introduced the concept of stapled gastroplasty as a simple, safe alternative to gastric and jejunoileal bypass and reported a less than 10 percent incidence of complications with their original technique.[10] Unfortunately, Pace and Carey's original technique of gastric stapling was associated with an unacceptably high incidence of early failure caused by staples gradually opening up and pulling out of the stomach.[11] During the past several years, a number of technical modifications of stapled gastroplasty have been devised both to eliminate staple-line disruption and to prevent gradual dilatation of the outlet stoma which has been incriminated as a cause of inadequate weight loss in some patients.

Our clinicial trial of stapled gastroplasty for treatment of morbid obesity employed an operative technique which we had shown to be both safe and effective in our laboratory evaluation of seven techniques of gastric stapling.[12,13] This paper summarizes our three-year experience with stapled gastroplasty in 56

*From the Department of Surgery, UMDNJ-Rutgers Medical School, New Brunswick, where Dr. Brolin is Associate Professor of Surgery; and from the Department of Psychiatry where Dr. Greenfield is Assistant Professor of Psychiatry. Ms. Kasnetz is Chief Clinical Dietitian and Ms. Clemow is a Clinical Psychologist at Middlesex General-University Hospital, New Brunswick. Correspondence may be addressed to Dr. Brolin, Department of Surgery, UMDNJ-Rutgers Medical School, Academic Health Science Center, CN 19, New Brunswick, NJ 08903.

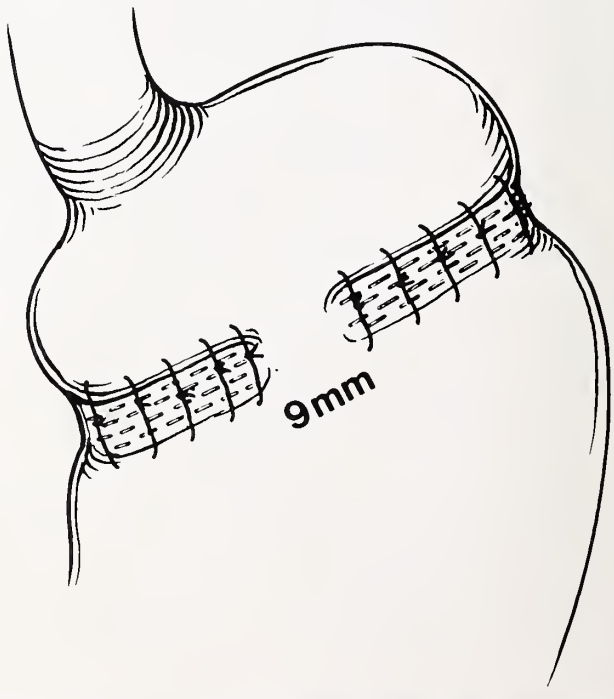
morbidly obese patients in conjunction with a discussion of the current status of surgery for morbid obesity.

CLINICAL MATERIAL

When we began our clinical study of stapled gastroplasty for the treatment of morbid obesity, the long-term results of this operation were unknown. Since March 1981, we have performed 56 stapled gastroplasties and 20 Roux-en-Y gastric bypasses upon 72 patients at Middlesex General-University Hospital. The patients ranged in age from 19 to 64 and included 56 females and 16 males. All but one of these patients conformed to the traditionally accepted guidelines for morbid obesity surgery in that they were more than 100 pounds over ideal body weight and free of obesity-related endocrine disorders. In addition, all of these patients had failed serious nonoperative attempts at weight reduction. All prospective patients have separate screening interviews with the operating surgeon, clinical dietitian, and psychiatrist. The surgeon explains the nature and risks involved with the operation and emphasizes the importance of long-term postoperative followup. The dietitian reviews each patient's diet history in detail. She also explains the dietary constraints associated with gastric reduction surgery emphasizing the liquid dietary restriction which is required for the first six weeks following operation. The psychiatrist evaluates the personal, psychological, and epidemiological history seeking to determine the patient's motivation, expectations, and long-term goals as they relate to the operation. In addition, the psychiatrist adminsters several psychological tests, including the Symptom Check List-90 (SCL-90), the Zung Self-Rating Depression Scale, and a standard I.Q. test. To date, 4 patients have been excused as candidates for gastric reduction surgery during the screening process; 2 for failure to demonstrate nonoperative attempts at weight reduction and 2 for psychological reasons. Independent, unsupervised attempts at weight reduction on the part of patients are not considered sufficient qualifications for gastric reduction surgery. No patient has been denied operation for medical reasons. Obesity-related medical problems, such as hypertension, diabetes, degenerative arthritis, and obesity-related cardiorespiratory disorders are considered specific indications for operation. Failure of previous operations for morbid obesity, such as jejunoileal bypass or gastric stapling procedures, also warrant strong consideration for a subsequent gastric reduction operation. The criteria for candidacy were liberalized for 1 patient with refractory hypertension who was 91 pounds over ideal body weight and whose internist could not control either her blood pressure or diet. Specific contraindications for gastric reduction operations include active peptic ulcer disease, alcoholism, and failure on the part of the patient to comprehend the nature and intent of gastric reduction surgery. Patients over the age of 65 generally are not considered candidates for obesity surgery. Prior to operation, all patients have a barium upper GI x-ray examination to rule out occult peptic ulcer disease and an ultrasound study of the gallbladder to rule out occult cholelithiasis. We recommend concomitant cholecystectomy for any patient with gallstones. Cholecystectomy generally adds no more than 15 minutes and virtually no additional risk to the operative procedure and is likely to save the patient the need for cholecystectomy at a later date. We also perform thyroid function studies and a fasting serum cortisol in all patients to help rule out unsuspected endocrine problems.

OPERATIVE PROCEDURES

Candidates for operation usually are admitted to the hospital one day prior to surgery. Patients with poorly controlled medical problems, such as diabetes, hypertension, or asthmatic bronchitis, may be admitted two or three days prior to operation. Both stapled gastroplasty and gastric bypass are performed through an upper midline incision. The esophagus is isolated and bluntly encircled at the level of the gastroesophageal junction with a Penrose drain. A point along the upper lesser curvature of the stomach 2 to 3 cm below the gastroesophageal junction then is devascularized creating a window for passage of the TA stapling instruments. For stapled gastroplasty, three staples are removed from the center of the TA-55 cartridge and the instrument is passed across the upper stomach with the aid of a 36-French rubber tube. The TA-55 stapler is positioned horizontally and fired, creating an upper pouch measuring 20 ± 5 cc liquid capacity. After removing the TA-55 stapler, a TA-90 stapler is positioned similarly across the upper stomach after three central staples have been removed from the cartridge. The TA-90 stapler is marked at the point where the staples have been removed and the mark on the TA-90 is precisely aligned with the previously created stoma in the center of the staple-line. After the TA-90 is fired and removed, the two double rows of staples are reinforced with interrupted 2-0 silk sutures placed through and through the staple-line. The completed operation is illustrated in the Figure. The peristomal sutures are placed precisely



Figure—Suture reinforced stapled gastroplasty with 20 ± 5 cc capacity upper pouch and 0.9 cm stoma.

TABLE 1

Mean Weight Loss After Stapled Gastroplasty

Pre Op (56)*	3 Mo. (56)*	6 Mo. (52)*	9 Mo. (34)*	12 Mo. (25)*	18 Mo. (12)*
292#	37# (13%)	58# (20%)	65# (25%)	73# (24%)	66# (22%)

Mean weight loss in pounds in 56 patients after stapled gastroplasty. Percentages represent percent of preoperative weight loss. Minimum followup is three months. Asterisk * = number of patients followed.

adjacent to the staples on either side of the 9 mm stoma to minimize subsequent stomal dilatation. Our technique of Roux-en-Y gastric bypass is similar to that performed by Pories[14] except that the EEA stapler is used to construct the calibrated gastrojejunostomy. The upper part of the stomach is partitioned using two parallel applications of the TA-90 stapler creating a 30 ± 5 cc upper gastric pouch.

The typical postoperative hospital stay is seven or eight days, most of which time is spend adjusting to the liquid diet. On the day of discharge, a limited barium upper GI is performed to examine the integrity of the staple-line and stoma. Patients are discharged on a 1,000-calorie full-liquid diet which is required for six weeks after operation. The dietitian counsels each patient prior to discharge and emphasizes the importance of balance within the liquid dietary restriction, as well as the need for a liquid multivitamin supplement during the first few weeks of convalescence. At the initial 3-week followup visit, the dietitian may add several soft solid foods, such as mashed potatoes and applesauce, if the patient is doing well with the liquid diet. At 6 weeks after operation, the liquid diet restriction is lifted and the patient is given a new menu which includes a variety of soft solid foods. The transition from soft solid foods to pulpy fruits, bread, and lean meat usually takes several months to accomplish. Patients have followup at 12 weeks and then at three-month intervals for the remainder of the first year after operation. At each visit, patients are cautioned to take small bites, chew thoroughly, swallow slowly, and stop eating at the first symptom of satiety. Calorie counting is reinforced with great emphasis placed on avoiding high-calorie liquids which can defeat these operations. After the first year, patients are seen at three- to six-month intervals depending upon how well they have progressed in terms of eating behavior and weight loss.

RESULTS

Mean weight loss for the 56 patients who underwent stapled gastroplasty is shown in Table 1. During the course of our study, 8 patients (14 percent) were either lost to followup or formally withdrew from the program. The rate of weight loss after stapled gastroplasty ranged from 3 to 5 pounds per week during the first six weeks then gradually declined to a rate of 1 to 2 pounds per week after several months. Weight loss generally begins to plateau between the sixth and ninth month after operation. Twenty-one of 44 patients (48 percent) whose weight was stabilized presently are within 50 percent of their ideal body weight. Thirty-two of these 44 patients (73 percent) now are less than 100 pounds over ideal body weight while the remaining 12 patients (27 percent) still are more than 100 pounds overweight and are considered failures by all criteria. Six of the 12 failures weighed more than 350 pounds prior to operation. Thirty-eight of 56 patients (68 percent) had obesity-related medical problems prior to operation as shown in Table 2. Only 5 of 19 patients (26 percent) between the ages of 20 and 35 had an obesity-related medical disorder whereas 33 of 37 patients (89 percent) over age 35 had one or more associated medical problems. The response of the various medical problems to the weight loss afforded by stapled gastroplasty is shown in Table 3. Amelioration of obesity-related medical problems with weight loss was remarkable even in patients who lost as little as 40 to 50 pounds. Each of the 4 patients in whom medical problems were unimproved did not lose a sufficient amount of weight.

TABLE 2

Associated Medical Problems 38/56 (68%)

1. Hypertension	27	(48%)
2. Hyperlipidemia	14	(25%)
3. Arthritis	11	(20%)
4. Diabetes	7	(13%)
5. Heart disease	7	(13%)
6. Bronchitis	4	(8%)
7. Sleep apnea	2	(4%)
8. Venous insufficiency	2	(4%)

Hypertension was the most common problem presenting in 48 percent of patients. Arthritis invariably involved weight-bearing joints, including knees, ankles, and lower back. Cardiac problems included symptoms of congestive failure in four patients and angina in three patients.

COMPLICATIONS

There have been only four early postoperative complications (7 percent) among the 56 patients who underwent stapled gastroplasty (Table 4). We have had only one complication in the last 38 operations. One of the two staple-line leaks resulted from a malfunction of the TA-55 stapler, while the other was suspected but never proved either by a gastrografin® radiographic swallow or at repeat laparotomy. Both patients with suspected leaks required reoperation. Wound dehiscence developed in a patient with a severe attack of postoperative asthmatic bronchitis whose coughing spasms could not be controlled with medications. There have been no splenic injuries or postoperative wound infections. All patients receive 1 gm of Cephazolin® intravenously prior to operation which is followed by three divided doses of 1 gm every eight hours during the first postoperative day. Our only late complication occurred in a 44-year-old woman who developed stomal stenosis and psychological difficulty adjusting to the change in eating habits forced upon her by the operation. Although she was always able to eat soft solid foods in the hospital, she invariably de-

TABLE 3

Medical Problems
Response to Weight Loss

Problem/# Pts	Resolved	Improved	Unchanged
Hyptertension (27)	19	7	1
Hyperlipidemia (14)	10	1	3
Arthritis (11)	10	1	—
Diabetes (7)	5	2	—
Angina/C.H.F. (7)	7	—	—
Bronchitis (4)	4	—	—
Sleep apnea (2)	2	—	—
Venous stasis (2)	2	—	—

Medical problems either improved or resolved in 34 of 38 patients (90 percent). Medical problems were considered resolved when they were controlled without the need for medications and improved when controlled on reduced doses of medications.

veloped problems with vomiting within a few days after discharge. After three hospitalizations for vomiting, her gastroplasty was reversed seven months after the initial operation. We have recognized one case of postoperative staple-line disruption which occurred in a woman who began eating solid food within several days of discharge from the hospital. After three days of protracted vomiting, she noted a sudden loss of early satiety with concomitant cessation of vomiting. Ellison demonstrated in dogs that the stomach stapled in continuity takes four to six weeks to heal securely, and as a result, recommended that all patients remain on a liquid diet for six to eight weeks after stapled gastroplasty.[11] An occasional episode of vomiting is not uncommon after gastric reduction surgery and generally results from patients eating too quickly. Two other patients developed postoperative vomiting of sufficient severity to warrant hospitalization. Both improved after several days without oral feeding and with intravenous fluid and now are able to consume small quantities of all types of solid food without difficulty. Repetitive episodes of vomiting can cause edema of the gastric mucosa at the stoma resulting in transient stomal stenosis. Because thiamin and other nutritional deficiencies have been reported as a result of protracted vomiting following gastric stapling procedures,[15,16] we promptly rehospitalize patients who are unable to maintain themselves on a full liquid diet as an outpatient.

Our psychiatric data basically have supported the commonly held notion that morbidly obese adults do not differ psychologically from the general population. We have discovered that patients with high SCL-90 scores suggesting covert "psychopathology" tend to have earlier onset of obesity and a much lower incidence of familial obesity than those patients with low SCL-90 scores. Our measurements of intelligence strongly correlate with the patient's comprehension of the nature and intent of the operative procedure and also correlate with the patient's ability to make low-calorie food choices after operation.

Because of the inconsistencies in weight loss in our experience with stapled gastroplasty and several recent reports showing significantly greater weight loss after gastric bypass, we began performing Roux-en-Y gastric bypass for morbid obesity in June 1983.[14,17] During the past six months, we have performed 20 gastric bypasses using our own modification of the Roux-en-Y technique.[18] Thus far, we have had only one early postoperative complication (5 percent) and no late complications. Four of these 20 patients have had revisions of failed gastroplasties. The rate of weight loss during the first six months after gastric bypass has been greater than with stapled gastroplasty. Mean weight loss in 5 patients followed for four months has been 68 pounds.

CASE REPORT 1

A 43-year-old 5'10", 344-pound man was presented to us as a candidate for gastric reduction surgery. At that time, he had hypertension which was refractory to drug therapy and a serum glucose of 497 mg/dl at his first hospital admission. An endocrinology consultant prescribed a 1,000-calorie ADA diet, and one week later his serum glucose was 303 mg/dl. His preoperative lipid profile showed a cholesterol of 254 mg/dl (normal: 150 to 225 mg/dl) and a triglyceride level of 816 mg/dl (normal: 50 to 150 mg/dl). Stapled gastroplasty was performed. His eight-day postoperative course was uncomplicated. He made the transition from the modified full liquid diet to soft solid foods without undue difficulty. Postoperative weight loss pattern has been very consistent. At eight months after operation, his weight was 220 pounds, his blood pressure was 130/80 without medication, fasting glucose was 135 mg/dl without medication, serum cholesterol was 205 mg/dl, and serum triglyceride was 117 mg/dl. He currently feels better than he has in years.

This case represents a successful result by all criteria. The patient has comfortably lost 125 pounds in eight months and is now 50 pounds over his ideal body weight of 170 pounds. All of his obesity-related medical problems are completely resolved without the need for medications. His current calorie intake ranges from 1,000 to 1,200 calories per day. He has become very calorie conscious and avoids the high-calorie liquids and junk food which can defeat the operation. His exercise tolerance has increased tremendously.

CASE REPORT 2

A 56-year-old 5'2", 269-pound woman underwent stapled gastroplasty at Middlesex General-University Hospital in October 1982. At that time, she was incapacitated by severe asthmatic bronchitis and sleep apnea syndrome. She also had essential hypertension which was poorly controlled by medications. Her postoperative course was slightly prolonged by her severe steroid dependent lung disease but otherwise was uncomplicated. During the following 13 months, her weight loss was slow but consistent. At her most recent visit, her weight was 193 pounds and blood pressure was 140/70. She has not required medication for her blood pressure since the second month after operation. The symptoms of sleep apnea syndrome have disap-

peared completely and her exercise tolerance has improved markedly. Her only current medication is theophylline elixir.

This patient represents one of our most gratifying results. After being incapacitated by severe obstructive lung disease and sleep apnea prior to operation, she now claims to be a new woman and is leading a normal life. She no longer is housebound by her pulmonary problems and is able to buy from the shelves at a regular clothing store for the first time in many years. Her present intake averages approximately 1,000 calories per day.

CASE REPORT 3

A 39-year-old 5'6", 312-pound woman underwent stapled gastroplasty in November 1981. Her past medical history was unremarkable except for a pulmonary embolus following an abdominal hysterectomy seven years earlier. She received mini-dose heparin prophylaxis for several days after operation and had an uneventful recovery. Over the ensuing 11 months, she lost 75 pounds, reaching a plateau at 243 pounds in October 1982. However, during the next 11 months, she gradually began to regain some of her lost weight. Her satiety response to solid food was satisfactory but she tended to concentrate her eating efforts on sweets and other junk food, particularly potato chips and pretzels. Her daily intake increased from approximately 1,100 calories to more than 2,000 calories per day. She was very disappointed in her weight gain and expressed interest in possible revision of her gastroplasty operation. It was explained to her that a second operation would not guarantee a successful long-term result. With this mutual understanding, she was readmitted to Middlesex General-University Hospital in September 1983 and had her stapled gastroplasty revised to a Roux-en-Y gastric bypass. Prior to operation, she underwent upper GI endoscopy which showed that her stoma had dilated gradually from the original 9 mm diameter to approximately 14 mm. Her postoperative course was uncomplicated and she was discharged on the seventh postoperative day. Since her revision to Roux-en-Y gastric bypass, she has lost 46 pounds during the first four months, and currently weighs 229 pounds.

This patient represents an example of "maladaptation" to stapled gastroplasty. Despite a good satiety response and a relatively minor degree of stomal dilatation, she gradually doubled her daily calorie intake by eating more frequently and concentrating her eating efforts on soft junk foods which do not produce much satiety. Hence, we attribute her failure with stapled gastroplasty to maladaptation rather than a technical failure. It remains to be seen how well this type of patient will fare after Roux-en-Y gastric bypass.

DISCUSSION

Stapled gastroplasty has several inherently appealing features which have led a number of prominent bariatric surgeons to consider it as the operation of choice for treatment of morbid obesity. The stomach or bowel is not opened and normal intestinal continuity is not disturbed. The operation itself is technically easier to perform than gastric bypass and usually can be accomplished in less than two hours. The incidence of postoperative complications has been acceptably low with virtually all of the current modifications of stapled gastroplasty,[14,19,20] but weight loss has been less reliable than with gastric or jejunoileal bypass. Perhaps the greatest problem with the use of stapled gastroplasty for treatment of morbid obesity is that several of the new operative techniques have been adopted "en masse" before long-term results have been established through controlled clinical trials. In 1982, Mason introduced vertical banded gastroplasty as an operation designed to remedy the problem of stomal dilatation which has been incriminated as the main reason for failure of the earlier techniques of stapled gastroplasty in maintaining long-term weight loss.[20,21] By wrapping a premeasured piece of Marlex®mesh around a lesser curvature stoma, stomal dilatation is limited to the diameter of the Marlex® strip. Our independent laboratory studies of vertical banded gastroplasty have confirmed Mason's hypothesis in this regard.[13] Yet, during the second year of postoperative followup, Mason's patients have shown a cumulative weight gain rather than continued weight loss.[22] Presently, there is no one technique of stapled gastroplasty which has withstood the test of time.

TABLE 4

Complications After Stapled Gastroplasty

Operative Complications	**4/56 (7%)**
Staple-line leak	2
Pulmonary embolus	1
Wound dehiscence	1
Deaths	None
Late complications	1/56 (2%)
Technical failure	1/56 (2%)

All gastric reduction operations can be looked upon as an enforced method of behavior modification which effectively prevent consumption of large quantities of solid food by reducing the reservoir function of the stomach by approximately 95 percent. On the other hand, these operations offer no barrier to the consumption of liquids or any type of solid food which can be liquified during the process of chewing. Although there is virtually no anatomical difference between individual gastroplasty operations, there is considerable difference in the adjustment of individual patients to the restrictions placed upon their eating behavior after this type of surgery. There is also considerable variation among patients in the subjective sensation of early satiety. Some patients describe the typical "feeling of fullness" while others report varying degrees of discomfort after eating small quantities of solid food. Since there is no malabsorption associated with stapled gastroplasty, the knowledge of the relative caloric values of food, particularly liquids, is extremely important. As patients make the gradual transition from liquid to solid food, the dietitian recommends a menu which emphasizes low-calorie selections within each food group. Patients who have followed closely the dietitian's advice have invariably done well in terms of weight loss. On the other hand, those patients who have not lost a sufficient amount of weight have usually "maladapted" to the operation in terms of their

postoperative eating habits. Maladaptation to the satiety-producing effects of gastric stapling operations assumes two basic forms: 1) abuse of high-calorie liquids and soft junk foods, such as cookies or candy; and 2) increased food contact in the form of snacks which generally are high in calories. Our postoperative dietary data suggest that when daily calorie intake consistently exceeds 1,200 calories, weight loss tends to cease, particularly in the older more sedentary patients.

After we became aware of Mason's two-year results with vertical banded gastroplasty and recognized some of the same problems with our own operative technique, we became interested in Roux-en-Y gastric bypass for treatment of morbid obesity. Since June 1983, we have performed 20 Roux-en-Y gastric bypasses, including 4 revisions of failed stapled gastroplasties. Our interest in Roux-en-Y gastric bypass was kindled by several recent prospective randomized clinical studies comparing gastric bypass with stapled gastroplasty, each of which showed significantly greater weight loss following gastric bypass.[14,23,24] In those same studies, the incidence of postoperative complications was similar between the two techniques. In our experience with 20 Roux-en-Y gastric bypasses, there has been only 1 nonfatal postoperative complication (5 percent) and no late complications. The use of a defunctionalized Roux-en-Y jejunal limb as opposed to a loop has eliminated the complications associated with bile reflux, such as stomal stenosis and ulceration, which developed in 10 to 15 percent of patients after loop gastric bypass.[8,25] Success in weight loss with the recent modifications of gastric bypass has been high. Halverson[26] reported a 90 percent success rate at two years following loop gastric bypass, while Pories [14] recently reported that all of his 42 Roux-en-Y gastric bypass patients lost 29 percent or more of their preoperative weight, with a mean weight loss of 98 pounds by 12 months after operation. After gastric bypass, weight loss continues for approximately 18 months before stabilization as compared with six to nine months of steady weight loss after stapled gastroplasty.[14,17,24] Reasons for greater weight loss after gastric bypass appear to be more physiologic than anatomic as both operations utlize a less than or equal to 50 cc upper gastric pouch and a less than or equal to 12 mm stoma. Exclusion of the duodenum from normal alimentary continuity leads to later mixing of pancreatic and biliary secretions with the digesta and probably results in a clinically insignificant degree of carbohydrate and fat malabsorption. It has been hypothesized that this small degree of malabsorption accounts for the significantly greater weight loss seen after Roux-en-Y gastric bypass.[14] There is no malabsorption associated with stapled gastroplasty.

The incidence of late complications after both stapled gastroplasty and gastric bypass is significantly lower than after jejunoileal bypass.[8,25,27] The majority of the late complications after gastric reduction operations have been caused by stenosis of the stoma. Many of the newer techniques of stapled gastroplasty incorporate premeasured pieces of prosthetic materials, such as Marlex® or Silastic®, as a means of preventing stomal dilatation. These materials have been known to erode through the gastric wall causing obstruction of the stoma and profuse postprandial vomiting.[28,29] Several types of nutritional deficiencies have been reported as a result of protracted vomiting following gastric reduction operations.[15,16,30] Surprisingly, the incidence of stomal stenosis is higher with stapled gastroplasty than with gastric bypass.[14,17,23] Three of our 56 gastroplasty patients have required readmission to the hospital for postprandial vomiting. Two of these 3 patients gradually improved over a period of a few days of hospitalization and now are able to eat all types of solid food without undue difficulty. The third patient did not improve to the point where she was able to eat solid foods satisfactorily, and at our insistence, eventually had her gastroplasty reversed. Two of our 20 gastric bypass patients have been readmitted to the hospital with postprandial vomiting but neither had radiographic or endoscopic evidence of stomal stenosis. The 2 gastric bypass patients improved after several days of hospitalization and have not had subsequent difficulty. We have a very low threshold for rehospitalization of patients with postprandial vomiting. On the other hand, an occasional episode of postprandial vomiting is a relatively common occurrence during the early phases of the transition from liquids to soft solid food. It generally takes a few weeks for most patients to adjust their eating habits to the restrictions placed upon them by the operation. Lean meat and fibrous vegetables are two of the most difficult types of food to eat after gastric reduction surgery. By six months after operation, virtually all of our patients are able to eat small quantities of meat and fresh vegetables.

In light of our 75-pound mean weight loss after stapled gastroplasty, we currently recommend Roux-en-Y gastric bypass as opposed to gastroplasty for all patients who are more than 150 pounds over ideal body weight. Because successful weight loss after gastroplasty requires some degree of dietary self-control on the part of the patient, we also recommend gastric bypass as opposed to gastroplasty for any patient whose eating habits are highly unstructured and include frequent in-between meal snacks. In the long term, it is unlikely that any one operation will result in satisfactory weight loss for all morbidly obese patients. Both stapled gastroplasty and Roux-en-Y gastric bypass are sufficiently safe in terms of the incidence of complications and effective in terms of amelioration of obesity-related medical problems. In light of the dismal results of nonoperative treatment, the high incidence of successful weight loss with Roux-en-Y gastric bypass warrants considerable enthusiasm for its use in the treatment of morbid obesity.

SUMMARY

Surgery for morbid obesity should be performed only in a multidisciplinary setting by a group which is dedicated to long-term postoperative followup and to critical analysis and reporting of the long-term results. Careful analysis of the long-term results of these operations can be expected to lead to better methods of patient selection and to an improved understanding among all health professionals of the role of gastric reduction surgery in the treatment of morbid obesity.

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*Cardizem is indicated in the treatment of angina pectoris due to coronary artery spasm and in the management of chronic stable angina (classic effort-associated angina) in patients who cannot tolerate therapy with beta-blockers and/or nitrates or who remain symptomatic despite adequate doses of these agents.

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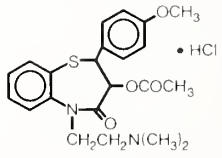
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30 mg and 60 mg tablets

DESCRIPTION

CARDIZEM® (diltiazem hydrochloride) is a calcium ion influx inhibitor (slow channel blocker or calcium antagonist). Chemically, diltiazem hydrochloride is 1,5-Benzothiazepin-4(5H)one,3-(acetyloxy) -5-[2-(dimethylamino)ethyl]-2,3-dihydro-2-(4-methoxyphenyl)-, monohydrochloride,(+) -cis-. The chemical structure is:



Diltiazem hydrochloride is a white to off-white crystalline powder with a bitter taste. It is soluble in water, methanol, and chloroform. It has a molecular weight of 450.98. Each tablet of CARDIZEM contains either 30 mg or 60 mg diltiazem hydrochloride for oral administration.

CLINICAL PHARMACOLOGY

The therapeutic benefits achieved with CARDIZEM are believed to be related to its ability to inhibit the influx of calcium ions during membrane depolarization of cardiac and vascular smooth muscle.

Mechanisms of Action. Although precise mechanisms of its antianginal actions are still being delineated, CARDIZEM is believed to act in the following ways:

1. Angina Due to Coronary Artery Spasm: CARDIZEM has been shown to be a potent dilator of coronary arteries both epicardial and subendocardial. Spontaneous and ergonovine-induced coronary artery spasm are inhibited by CARDIZEM.
2. Exertional Angina: CARDIZEM has been shown to produce increases in exercise tolerance, probably due to its ability to reduce myocardial oxygen demand. This is accomplished via reductions in heart rate and systemic blood pressure at submaximal and maximal exercise work loads.

In animal models, diltiazem interferes with the slow inward (depolarizing) current in excitable tissue. It causes excitation-contraction uncoupling in various myocardial tissues without changes in the configuration of the action potential. Diltiazem produces relaxation of coronary vascular smooth muscle and dilation of both large and small coronary arteries at drug levels which cause little or no negative inotropic effect. The resultant increases in coronary blood flow (epicardial and subendocardial) occur in ischemic and nonischemic models and are accompanied by dose-dependent decreases in systemic blood pressure and decreases in peripheral resistance.

Hemodynamic and Electrophysiologic Effects. Like other calcium antagonists, diltiazem decreases sinoatrial and atrioventricular conduction in isolated tissues and has a negative inotropic effect in isolated preparations. In the intact animal, prolongation of the AH interval can be seen at higher doses.

In man, diltiazem prevents spontaneous and ergonovine-provoked coronary artery spasm. It causes a decrease in peripheral vascular resistance and a modest fall in blood pressure and, in exercise tolerance studies in patients with ischemic heart disease, reduces the heart rate-blood pressure product for any given work load. Studies to date, primarily in patients with good ventricular function, have not revealed evidence of a negative inotropic effect; cardiac output, ejection fraction, and left ventricular end diastolic pressure have not been affected. There are as yet few data on the interaction of diltiazem and beta-blockers. Resting heart rate is usually unchanged or slightly reduced by diltiazem.

Intravenous diltiazem in doses of 20 mg prolongs AH conduction time and AV node functional and effective refractory periods approximately 20%. In a study involving single oral doses of 300 mg of CARDIZEM in six normal volunteers, the average maximum PR prolongation was 14% with no instances of greater than first-degree AV block. Diltiazem-associated prolongation of the AH interval is not more pronounced in patients with first-degree heart block. In patients with sick sinus syndrome, diltiazem significantly prolongs sinus cycle length (up to 50% in some cases).

Chronic oral administration of CARDIZEM in doses of up to 240 mg/day has resulted in small increases in PR interval, but has not usually produced abnormal prolongation. There were, however, three instances of second-degree AV block and one instance of third-degree AV block in a group of 959 chronically treated patients.

Pharmacokinetics and Metabolism. Diltiazem is absorbed from the tablet formulation to about 80% of a reference capsule and is subject to an extensive first-pass effect, giving an absolute bioavailability (compared to intravenous dosing) of about 40%. CARDIZEM undergoes extensive hepatic metabolism in which 2% to 4% of the unchanged drug appears in the urine. In vitro binding studies show CARDIZEM is 70% to 80% bound to plasma proteins. Competitive ligand binding studies have also shown CARDIZEM binding is not altered by therapeutic concentrations of digoxin, hydrochlorothiazide, phenylbutazone, propranolol, salicylic acid, or warfarin. Single oral doses of 30 to 120 mg of CARDIZEM result in detectable plasma levels within 30 to 60 minutes and peak plasma levels two to three hours after drug administration. The plasma elimination half-life following single or multiple drug administration is approximately 3.5 hours. Desacetyl diltiazem is also present in the plasma at levels of 10% to 20% of the parent drug and is 25% to 50% as potent a coronary vasodilator as diltiazem. Therapeutic blood levels of CARDIZEM appear to be in the range of 50 to 200 ng/ml. There is a departure from dose-linearity when single doses above 60 mg are given; a 120-mg dose gave blood levels three times that of the 60-mg dose. There is no information about the effect of renal or hepatic impairment on excretion or metabolism of diltiazem.

INDICATIONS AND USAGE

1. **Angina Pectoris Due to Coronary Artery Spasm.** CARDIZEM is indicated in the treatment of angina pectoris due to coronary artery spasm. CARDIZEM has been shown effective in the treatment of spontaneous coronary artery spasm presenting as Prinzmetal's variant angina (resting angina with ST-segment elevation occurring during attacks).
2. **Chronic Stable Angina (Classic Effort-Associated Angina).** CARDIZEM is indicated in the management of chronic stable angina. CARDIZEM has been effective in controlled trials in reducing angina frequency and increasing exercise tolerance.

There are no controlled studies of the effectiveness of the concomitant use of diltiazem and beta-blockers or of the safety of this combination in patients with impaired ventricular function or conduction abnormalities.

CONTRAINDICATIONS

CARDIZEM is contraindicated in (1) patients with sick sinus syndrome except in the presence of a functioning ventricular pacemaker, (2) patients with second- or third-degree AV block except in the presence of a functioning ventricular pacemaker, and (3) patients with hypotension (less than 90 mm Hg systolic).

WARNINGS

1. **Cardiac Conduction.** CARDIZEM prolongs AV node refractory periods without significantly prolonging sinus node recovery time, except in patients with sick sinus syndrome. This effect may rarely result in abnormally slow heart rates (particularly in patients with sick sinus syndrome) or second- or third-degree AV block (six of 1243 patients for 0.48%). Concomitant use of diltiazem with beta-blockers or digitalis may result in additive effects on cardiac conduction. A patient with Prinzmetal's angina developed periods of asystole (2 to 5 seconds) after a single dose of 60 mg of diltiazem.
2. **Congestive Heart Failure.** Although diltiazem has a negative inotropic effect in isolated animal tissue preparations, hemodynamic studies in humans with normal ventricular function have not shown a reduction in cardiac index nor consistent negative effects on contractility (dp/dt). Experience with the use of CARDIZEM alone or in combination with beta-blockers in patients with impaired ventricular function is very limited. Caution should be exercised when using the drug in such patients.
3. **Hypotension.** Decreases in blood pressure associated with CARDIZEM therapy may occasionally result in symptomatic hypotension.
4. **Acute Hepatic Injury.** In rare instances, patients receiving CARDIZEM have exhibited reversible acute hepatic injury as evidenced by moderate to extreme elevations of liver enzymes. (See PRECAUTIONS and ADVERSE REACTIONS.)

PRECAUTIONS

General. CARDIZEM (diltiazem hydrochloride) is extensively metabolized by the liver and excreted by the kidneys and in bile. As with any new drug given over prolonged periods, laboratory parameters should be monitored at regular intervals. The drug should be used with caution in patients with impaired renal or hepatic function. In subacute and chronic dog and rat studies designed to produce toxicity, high doses of diltiazem were associated with hepatic damage. In special subacute hepatic studies, oral doses of 125 mg/kg and higher in rats were associated with histological changes in the liver which were reversible when the drug was discontinued. In dogs, doses of 20 mg/kg were also associated with hepatic changes; however, these changes were reversible with continued dosing.

Drug Interaction. Pharmacologic studies indicate that there may be additive effects in prolonging AV conduction when using beta-blockers or digitalis concomitantly with CARDIZEM. (See WARNINGS).

Controlled and uncontrolled domestic studies suggest that concomitant use of CARDIZEM and beta-blockers or digitalis is usually well tolerated. Available data are not sufficient, however, to predict the effects of concomitant treatment, particularly in patients with left ventricular dysfunction or cardiac conduction abnormalities. In healthy volunteers, diltiazem has been shown to increase serum digoxin levels up to 20%.

Carcinogenesis, Mutagenesis, Impairment of Fertility. A 24-month study in rats and a 21-month study in mice showed no evidence of carcinogenicity. There was also no mutagenic response in in vitro bacterial tests. No intrinsic effect on fertility was observed in rats.

Pregnancy. Category C. Reproduction studies have been conducted in mice, rats, and rabbits. Administration of doses ranging from five to ten times greater (on a mg/kg basis) than the daily recommended therapeutic dose has resulted in embryo and fetal lethality. These doses, in some studies, have been reported to cause skeletal abnormalities. In the perinatal/postnatal studies, there was some reduction in early individual pup weights and survival rates. There was an increased incidence of stillbirths at doses of 20 times the human dose or greater.

There are no well-controlled studies in pregnant women; therefore, use CARDIZEM in pregnant women only if the potential benefit justifies the potential risk to the fetus.

Nursing Mothers. It is not known whether this drug is excreted in human milk. Because many drugs are excreted in human milk, exercise caution when CARDIZEM is administered to a nursing woman if the drug's benefits are thought to outweigh its potential risks in this situation.

Pediatric Use. Safety and effectiveness in children have not been established.

ADVERSE REACTIONS

Serious adverse reactions have been rare in studies carried out to date, but it should be recognized that patients with impaired ventricular function and cardiac conduction abnormalities have usually been excluded.

In domestic placebo-controlled trials, the incidence of adverse reactions reported during CARDIZEM therapy was not greater than that reported during placebo therapy.

The following represent occurrences observed in clinical studies which can be at least reasonably associated with the pharmacology of calcium influx inhibition. In many cases, the relationship to CARDIZEM has not been established. The most common occurrences, as well as their frequency of presentation, are: edema (2.4%), headache (2.1%), nausea (1.9%), dizziness (1.5%), rash i asthenia (1.2%), AV block (1.1%). In addition, the following were reported infrequently (less than 1%) with the order of pre tion corresponding to the relative frequency of occurrence.

Cardiovascular:	Flushing, arrhythmia, hypotension, br dia, palpitations, congestive heart f syncope.
Nervous System:	Paresthesia, nervousness, somno tremor, insomnia, hallucinations, and an
Gastrointestinal:	Constipation, dyspepsia, diarrhea, vo mild elevations of alkaline phosphatase, SGPT, and LDH.
Dermatologic:	Pruritus, petechiae, urticaria, photosen
Other:	Polyuria, nocturia.

The following additional experiences have been noted:

A patient with Prinzmetal's angina experiencing episo vasospastic angina developed periods of transient asympt asystole approximately five hours after receiving a single dose of CARDIZEM.

The following postmarketing events have been reported quently in patients receiving CARDIZEM: erythema multiform kopenia; and extreme elevations of alkaline phosphatase, SGPT, LDH, and CPK. However, a definitive cause and effect b these events and CARDIZEM therapy is yet to be establishe

OVERDOSAGE OR EXAGGERATED RESPONSE

Overdosage experience with oral diltiazem has been l Single oral doses of 300 mg of CARDIZEM have been well tol by healthy volunteers. In the event of overdosage or exagg response, appropriate supportive measures should be emplo addition to gastric lavage. The following measures may be cons

Bradycardia	Administer atropine (0.60 to 1.0 mg). I is no response to vagal blockade, adm isoproterenol cautiously.
High-Degree AV Block	Treat as for bradycardia above. Fixed degree AV block should be treated wi diac pacing.
Cardiac Failure	Administer inotropic agents (isoprote dopamine, or dobutamine) and diuretics
Hypotension	Vasopressors (eg, dopamine or levart bitartrate).

Actual treatment and dosage should depend on the severity clinical situation and the judgment and experience of the t physician.

The oral/LD_{50}'s in mice and rats range from 415 to 740 and from 560 to 810 mg/kg, respectively. The intravenous LD these species were 60 and 38 mg/kg, respectively. The oral L dogs is considered to be in excess of 50 mg/kg, while lethali seen in monkeys at 360 mg/kg. The toxic dose in man is not k but blood levels in excess of 800 ng/ml have not been asso with toxicity.

DOSAGE AND ADMINISTRATION

Exertional Angina Pectoris Due to Atherosclerotic nary Artery Disease or Angina Pectoris at Rest Due to nary Artery Spasm. Dosage must be adjusted to each pa needs. Starting with 30 mg four times daily, before meals bedtime, dosage should be increased gradually (given in d doses three or four times daily) at one- to two-day interval optimum response is obtained. Although individual patient respond to any dosage level, the average optimum dosage appears to be 180 to 240 mg/day. There are no available data co ing dosage requirements in patients with impaired renal or h function. If the drug must be used in such patients, titration sho carried out with particular caution.

Concomitant Use With Other Antianginal Agents:

1. **Sublingual NTG** may be taken as required to abort anginal attacks during CARDIZEM therapy.
2. **Prophylactic Nitrate Therapy**—CARDIZEM may be coadministered with short- and long-acting nitrates, but have been no controlled studies to evaluate the antia effectiveness of this combination.
3. **Beta-blockers.** (See WARNINGS and PRECAUTIONS.)

HOW SUPPLIED

Cardizem 30-mg tablets are supplied in bottles of 100 0088-1771-47) and in Unit Dose Identification Paks of 100 0088-1771-49). Each green tablet is engraved with MARION side and 1771 engraved on the other. CARDIZEM 60-mg tablets are supplied in bottles of 100 (NDC 0088-1772-47) and Dose Identification Paks of 100 (NDC 0088-1772-49). Each tablet is engraved with MARION on one side and 1772 on the

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CARDIAC SARCOIDOSIS*

LAWRENCE A. GAETANO, M.D., AND LUDMILA M. ENGELBACH, M.D., TOMS RIVER*

A case of sudden death in a 70-year-old man with suspected coronary arterial disease and sarcoidosis is presented. The autopsy revealed severe damage to the extramural coronary circulation caused by granulomatous angiitis superimposed on a preceding arteriosclerotic process.

Sarcoidosis involving the heart has been known as a specific clinical entity since 1929 when Bernstein described a granulomatous lesion at autopsy.[1] In 1939, Cotter was able to correlate clinical information with autopsy confirmation in an 18-year-old male with atrial fibrillation and complete heart block.[2] The most complete and concise report came from a Johns Hopkins Hospital and Massachusetts General Hospital combined study of 200 cases of sarcoidosis in which 20 percent of 92 autopsied cases had confirmed myocardial involvement.[3]

Since the Johns Hopkins study, many reviews and reports have reached the literature but added little to our knowledge of the disease. Myocardial sarcoidosis has become more predictable in its clinical presentation. Such manifestations as arrhythmias, congestive heart failure, pericardial effusions, and valvular involvement are well described and searched for by the astute clinician, but cardiac sarcoidosis is recognized only as the result of postmortem examination.

The following case report and discussion will review the clinical and morphologic features of cardiac sarcoidosis and offer another variation to its mode of involvement.

CASE REPORT

A 70-year-old white male with a history of atherosclerotic heart disease, chronic schizophrenia, and possible sarcoidosis was hospitalized following a syncopal episode. Approximately two years prior to admission, he suffered a myocardial infarction at another hospital, where the diagnosis of sarcoidosis was suspected and reportedly confirmed. Physical examination was significant only for a grade III/IV systolic murmur at the aortic area and an S4 gallop.

Pertinent laboratory data showed the following: The hemoglobin was 13.7 gm/dl, the WBC was 9,200 with a normal differential count. The urea nitrogen was 31 mg/dl, the creatinine 1.3 mg/dl, the calcium 9.2 mg/dl, and the total protein 6.1 gm/dl (the albumin 3.8 gm/dl, the globulin 2.3 gm/dl). The glucose was 126 mg/dl; the uric acid was 4.0 mg/dl. The creatine phosphokinase was 25 U per liter, the SGOT, 17 units, and the LDH, 201 units. The total bilirubin was 0.7 mg/dl, the alkaline phophatase was 44 units. The serum electrolytes and urine were normal. An antinuclear antibody titer was 1:20 with a diffuse pattern. A VDRL was nonreactive and an angiotensin-converting enzyme was 23 IU (normal 12 to 36). A tuberculin skin test (PPD, 5TU) was negative.

A chest x-ray demonstrated bilateral hilar prominence (Figure 1). His initial electrocardiogram revealed

*From the Department of Internal Medicine and the Department of Pathology, Monmouth Medical Center, Long Branch. Correspondence may be addressed to Dr. Gaetano, Community Memorial Hospital, Toms River, NJ 08753.

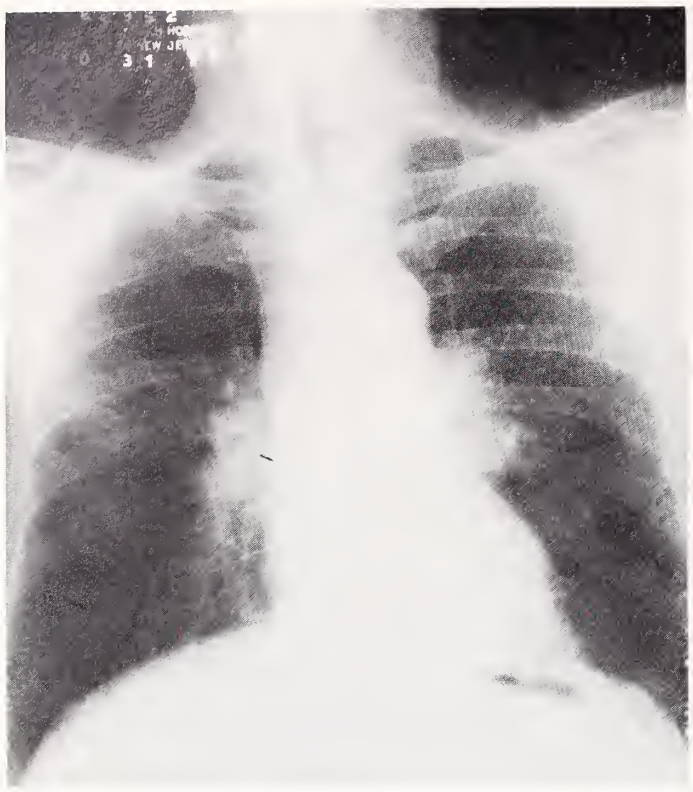


Figure 1—Chest x-ray demonstrating bilateral hilar prominence.

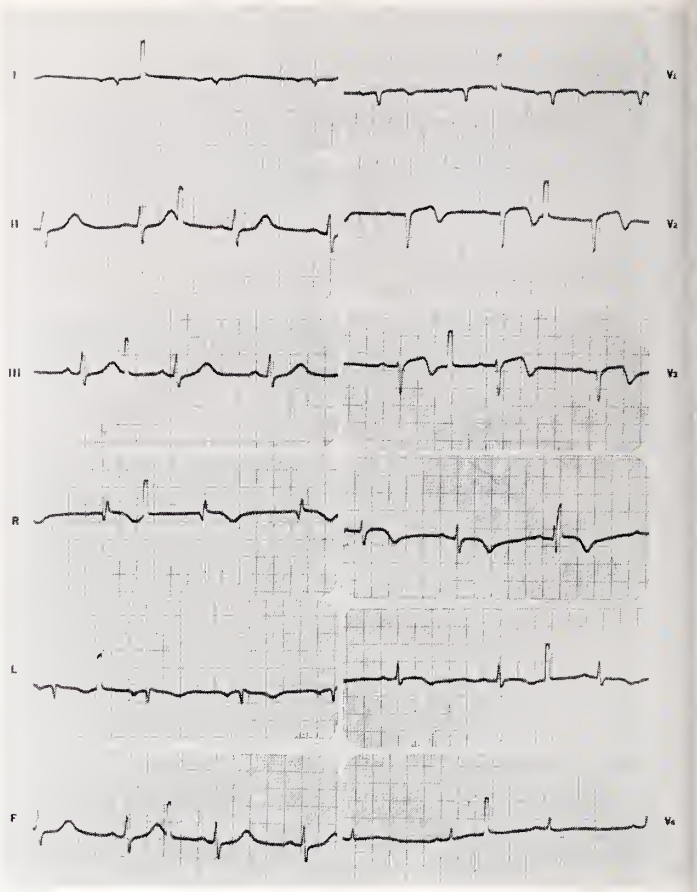


Figure 2—Patient's initial electrocardiogram.

a first degree AV heart block, frequent premature ventricular contractions, and a pattern suggesting anterolateral wall infarction (Figure 2). Subsequent electrocardiograms and cardiac enzymes were not diagnostic of myocardial infarction. A 24-hour Holter monitor study revealed frequent multifocal premature ventricular contractions, at times in couplets. An echocardiogram to determine the significance of his aortic murmur demonstrated increased echoes on the aortic valve suggesting calcification, mild thickening of the posterior wall and septum, and anterior clear space indicating a pleural or pericardial effusion.

The patient was treated with procainamide and achieved therapeutic levels. He was discharged with a diagnosis of syncope, secondary to a cardiac arrhythmia and possible sarcoidosis. The medical records confirming his sarcoidosis were pending at the time of discharge. Three days later he had another Stokes-Adams attack and was taken to the emergency room, where cardiopulmonary resuscitation was instituted. His initial rhythm was cardiac standstill; although periods of marked sinus bradycardia were noted before resuscitation, attempts were considered futile.

Postmortem examination revealed enlarged hilar, mediastinal, and peripancreatic lymph nodes which were replaced entirely by noncaseating granulomata. These were typical for sarcoidosis showing inconspicuous necrosis, hyalinization, and collections of lymphocytes and giant cells (Figure 3). Similar lesions were found in the liver. Focal collections of lymphocytes, histiocytes, and giant cells containing occasional asteroid bodies were observed also around small vessels in the lung and pancreas.

The heart showed biventricular dilatation with pericardial effusion (100 cc of serous fluid) and patchy fibrotic scarring of the anteroseptal wall. A single

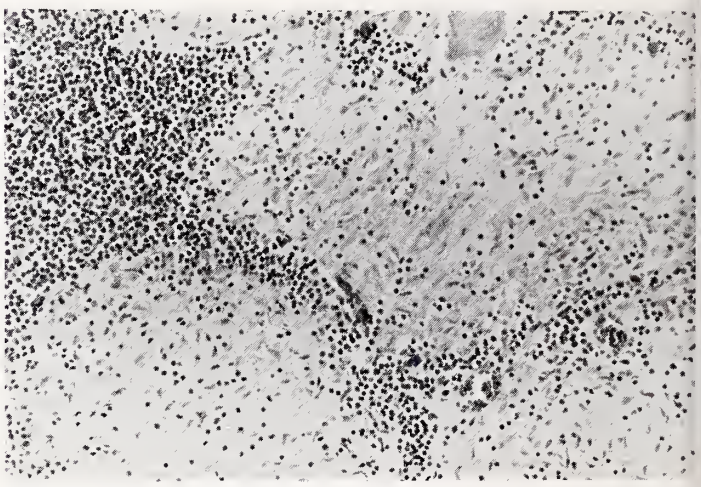


Figure 3—Noncaseating granulomata in hilar lymph nodes (H&E x 50).

cluster of lymphocytes and epithelioid cells without definite granuloma formation was present in proximity to an intramural artery, but no other intramural granulomas were seen. The aortic valve was stenosed with small calcific deposits in the posterior cusp which were surrounded by scattered lymphocytes but no granulomas.

Proximal segments of both coronary arteries showed considerable luminal narrowing. The most severely affected was the descending branch of the left coronary artery which showed focal adventitial lymphocytic cuffing and medial fibrinoid changes attributable to the arteriosclerotic process. The internal elastic membrane was disrupted. Early granulomatous inflammation within the media, unrelated to the fragmented elastic fibers, consisted of scattered epithelioid cells and small necrotic foci without any stainable bacteria

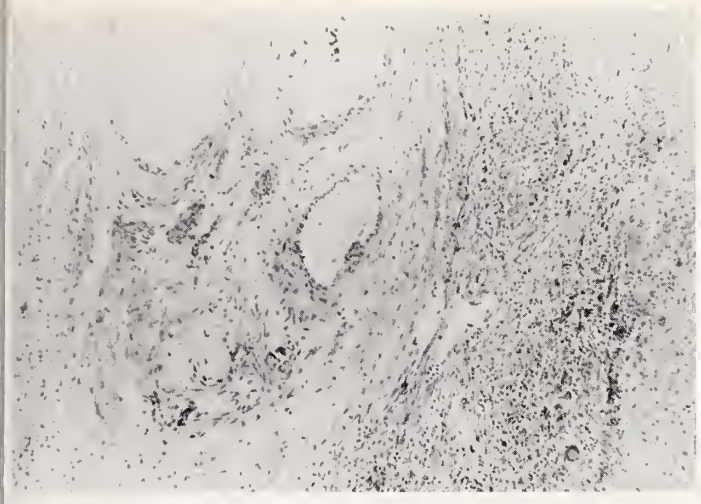


Figure 4—Intimal fibroblastic proliferation and inflammation around the recanalized lumen of the descending branch of the left coronary artery (H&E x 50).

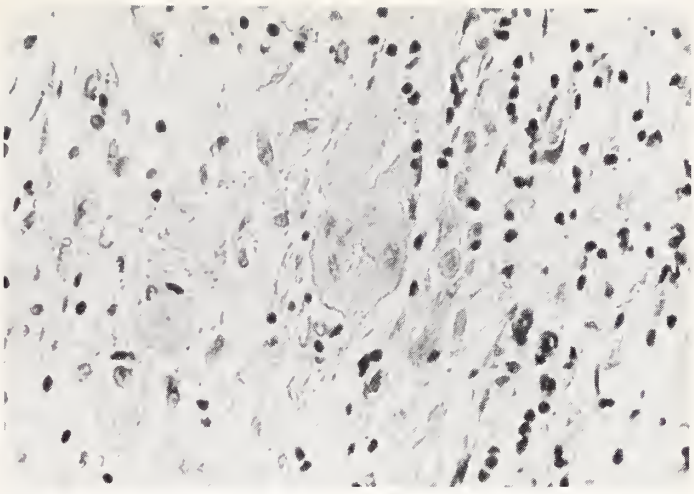


Figure 5—Inflamed intima with giant cell containing asteroid body (H&E x 400).

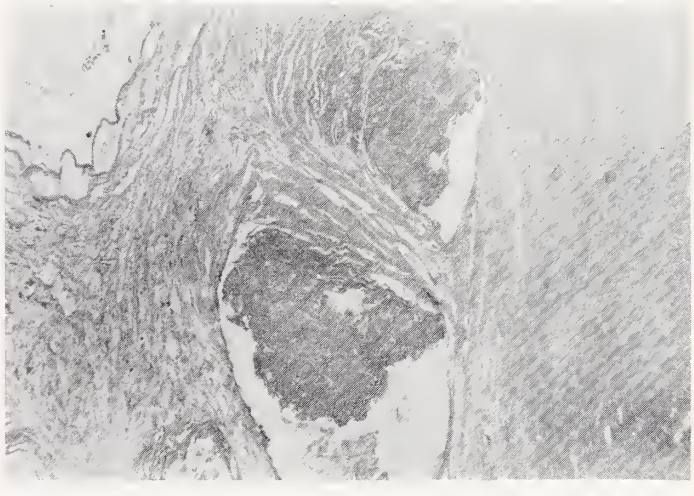


Figure 6—Thrombus within the lumen (Alcian green x 50).

and fungi. Marked luminal narrowing was caused by a variable degree of fibroblastic intimal proliferation and inflammation. The inflammatory infiltrate consisted of lymphocytes and giant cells accompanied by rare epithelioid cells (Figure 4). Giant cells were of the Langhans' type with peripherally located nuclei and rare asteroid bodies within their cytoplasm (Figure 5). The endothelial surface seemed to remain intact except for the short segment of the artery where recent thrombus developed and caused near complete luminal occlusion (Figure 6).

CLINICAL DISCUSSION

Sarcoidosis is a multisystem disease characterized by the presence of noncaseating epithelioid granulomas in various organs. They are known to occur in the lung, lymph nodes, spleen, liver, skin, eyes, and heart. Cardiac sarcoidosis is found in approximately 20 percent of known cases of sarcoidosis in autopsy series.[3] The various modes of presentation depend on the extent of cardiac involvement. The granulomas may be small and discrete but strategically located on a conduction fiber, or they may be diffuse and infiltrate the entire myocardium and adjacent pericardium. The major clinical manifestations of cardiac sarcoidosis are arrhythmias with sudden death, congestive heart failure, and pericardial effusions. Less often featured are valvular lesions producing murmurs or direct coronary artery lesions causing electrocardiographic changes suggesting myocardial infarction.

Arrhythmias and conduction disturbances are the most common presenting features of cardiac sarcoidosis. Roberts et al., in a study of 113 necropsy patients, found that 67 percent of patients whose cardiac dysfunction clearly was the result of sarcoid granulomatous infiltration had a sudden death arrhythmia.[4] Ventricular tachycardia is the most frequent major arrhythmia[5] and has been found to be extremely resistant to standard antiarrhythmic therapy.[6]

Other conduction disturbances seen in cardiac sarcoidosis include first and second degree heart block, complete heart block, or isolated bundle-branch block. It appears that localization of granulomas at various strategic areas of the conduction system can explain these conduction disturbances. In 1971, Gozo et al. reported a case of direct involvement of the SA node in a patient who had a sudden death arrhythmia and postulated that sinus arrest with cardiac standstill was the cause of death.[7] James described an affinity of sarcoid granulomas for the AV node and His bundle, which would explain the high incidence of heart blocks.[8] Bharati et al. discussed a case in which the electrocardiogram revealed right bundle-branch block with a first degree and intermittent third degree AV blocks and recurrent ventricular tachycardia.[9] Postmortem examination confirmed sarcoid infiltration of the AV node, His bundle, and bundle branches.

It appears that in our case, a finding of first degree AV block, multifocal premature ventricular contractions with an initial Stokes-Adams attack, and a sudden death arrhythmia, suggest disturbances of cardiac conduction and impulse formation. His final rhythm is suspicious, but certainly not diagnostic, of sinus node involvement producting sinus arrest, then extreme sinus bradycardia.

Another common presenting feature of cardiac sarcoidosis is congestive cardiomyopathy. In the series by Roberts, cardiomyopathy accounted for 40 percent of the patients with myocardial infiltration by granulomas.[4] The most frequent observation is a deposition of granulomas and fibrous scars involving a major portion of the left ventricular free wall. A case report and discussion by Virmani described a 35-year-old white male who developed congestive heart failure,

diagnosed premortem as idiopathic dilated cardiomyopathy.[10] Echocardiogram revealed dilated chambers and a thickened left ventricular free wall and septum. Autopsy reported diffuse involvement of all chambers with sarcoid granulomas.

Our patient displayed no symptoms or signs of congestive heart failure, most likely due to the discrete nature of the involvement. Thickening of the left ventricular posterior wall and septum were reported premortem in the echocardiogram, but offered no clinical significance. In addition, there was no notable sarcoid infiltration of the myocardium.

A third and less common presentation of cardiac sarcoidosis is pericardial disease. Shiff reported the first documented case of pericardial effusion due to sarcoid granulomas.[11] At surgery for partial pericardiectomy, one liter of serous fluid was drained and histology confirmed the diagnosis in that case.[11] A somewhat different finding was noted in one of two cases reported by Gozo who described the first case of hemorrhagic pericarditis with effusion in sarcoidosis.[7]

In our patient, the echocardiogram noted the appearance of an anterior clear space suggestive of pericardial effusion. The autopsy confirmed the presence of 100 cc of pericardial fluid, described as the classic serous type.

Valvular lesions are another infrequent outcome of sarcoidosis. In the Roberts's study, 18 percent of the patients had apical murmurs and only 38 percent of those had sarcoid granulomas in the papillary muscle itself.[4] It was concluded that granulomatous infiltration of the papillary muscles and the free wall beneath them is not the most common cause of mitral regurgitation in sarcoidosis. It appeared more often that the cause of the murmurs was the direct effect of altered papillary muscle function due to the dilated left ventricular chamber.

As discussed earlier, the echocardiogram in our patient was done for suspected aortic stenosis, suggested by a grade III/IV systolic murmur over the aortic area. The study revealed aortic echoes, and hemodynamically nonsignificant aortic stenosis was concluded. The necropsy report described the involvement of the aortic valve by calcifications of the posterior cusp. No evidence of sarcoidosis was suggested and only minimal lymphocytic infiltration was reported.

More recently, some discussion has surfaced regarding the direct involvement of the coronary circulation by sarcoidosis. A typical presentation of angina has been reported by Stephen, in which the electrocardiogram was highly suggestive, but autopsy showed the coronary arteries were not involved.[13] James described fibrous dysplasia of the SA and AV nodal arteries.[8] He also observed that granuloma frequently surrounded the small caliber intramural coronary arteries with occasional invasion into the adventitia or media. The luminal narrowing was a result of intimal fibroblastic proliferation.

Multiple sections of the severely damaged anterior descending branch of the left coronary artery in our patient showed sparse lymphocytic aggregates within the adventitia and focal fibrinoid change within the media. These changes, together with fibroblastic intimal proliferation and fragmentation of the internal elastic lamin are characteristically found in arteriosclerotic vessels. They were expressed in mild degree and it is reasonable to assume that they preceded the inflammation. Numerous authors (James, Virmani, and Morales) observed fibroblastic intimal proliferation within the small intramural arterial branches where the resulting intraluminal narrowing was aggravated by granulomas present in the adjacent myocardium or within the adventitia or media.[8,10,14] On the contrary, in our case, the granulomatous inflammation rested in the intimal medial junction and within the intima. The giant cells did not show relation to the fragmented internal elastic membrane and the presence of asteroid bodies within them were consistent with the sarcoid arteritis. Asteroid bodies occur rarely in other conditions.

Our patient had a history of a myocardial infarction two years earlier, after having been found in the street hallucinating, agitated, and irrational. There were never any complaints of chest pain reported, but his electrocardiogram was highly suggestive of an infarction. Similarly, a syncopal episode prompted admission and a diagnosis of myocardium infarction was entertained as a result of his electrocardiogram despite the absence of chest pain. The autopsy reported moderate atherosclerosis of the left anterior descending artery and fibrosis of the anteroseptal wall with no morphological evidence of an acute episode. It would seem then that the sarcoid arteritis was the most significant factor contributing to this patient's demise and it seems reasonable to include cardiac sarcoidosis in the list of causes of occlusive coronary artery disease.

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Panic Disorder: Fear Disguised as Medical Illness

Kenneth J. Weiss, M.D., Camden*

Panic disorder masquerades as a variety of medical ailments. Clinicians should take a fresh look at their patients with severe episodic anxiety, mysterious bodily symptoms, and irrational avoidances, and see if they fit the pattern of panic disorder.

Anyone is liable to become terrified when faced with a life-threatening stimulus. In addition to the awareness that there is an emergency, the sympathetic nervous system provides the well-known fight-flight reaction: blood flow is shunted from the viscera to the muscles, the heart races, the pupils dilate, the body is tense and tremulous, and the mouth is dry. Suppose there were a condition in which this autonomic reaction occurred seemingly spontaneously. An individual would find himself in the midst of a fight-flight response with no awareness of a life-threatening stimulus. This is exactly the situation in the anxiety syndrome known as panic disorder.

Although anxious individuals long have been known to have panic attacks,[1] the concept of panic disorder did not reach awareness in the medical community until the publication of the new psychiatric nomenclature in 1980.[2] In this manual, what formerly was called "anxiety neurosis" was divided into generalized anxiety and panic disorder. The following criteria apply to panic disorder:

1. There are at least three panic attacks within a three-week period in circumstances other than during marked physical exertion or in a life-threatening situation.

2. Panic attacks are manifested by discrete periods of apprehension or fear, and at least four of the following symptoms appear during each attack: dyspnea, palpitations, chest pain or discomfort, choking or smothering sensations, dizziness, feelings of unreality, paresthesias, hot and cold flashes, sweating, faintness, trembling, or fear of dying or going crazy.

These criteria are in contrast with generalized anxiety, in which the symptoms persist continuously for a month or more and are milder in intensity.

Since normal fear, warranted anxiety, and panic disorder follow the same final common pathway (the autonomic nervous system), an anxious individual characteristically will ascribe meaning to the symptoms. In the case of normal fear and anxiety, the source of stress ordinarily is apparent. In panic disorder, the attacks seem to come out of the blue. Hence, the term "endogenous anxiety" has been proposed.[3] As the symptom list implies, the patient may sense that something is terribly wrong within his body. It curiously is characteristic of patients with panic disorder that they ascribe the symptoms to a nonpsychiatric illness.[4] Hence, one estimate indicated 10 to 14 percent of the practice of cardiologists is comprised of panic disorder patients.[5]

The prevalence of panic disorder is 1 to 2 percent of the general population.[6] Because physicians have

*From the Department of Psychiatry, Cooper Hospital/University Medical Center. Correspondence may be addressed to Dr. Weiss, One Cooper Plaza, Camden, NJ 08103.

not been aware of panic disorder and its manifestations, we generally have relegated these patients to pejorative categories such as hypochondriac, cardiac neurotic, or "crock." Commonly, patients are given antianxiety drugs in small dosages, which do little for the panic attacks but may help with anticipatory anxiety (about when the next attack will occur). Since patients are unaware that panic attacks are spontaneous outpourings of autonomic activity, it is natural for them to ascribe the episodes to a stressor in the environment.

The following is an illustration of the typical onset and early evolution of panic disorder:

A patient reported she was looking at fruit at the supermarket when she was seized by an overwhelming sense of doom and an irresistible urge to flee. She experienced a shortness of breath, a pounding heart beat, and a feeling that she would lose control. She fled to the parking lot and was about to call for help when the attack subsided. The episode was frightening to the extent that she made several adaptations. First, she ascribed her attack to her presence in the supermarket. (Although this was an irrational idea, she refused to return to the supermarket for several months.) Second, she had a medical evaluation, including physical examination, blood tests, cardiogram, and glucose tolerance test (her mother was diabetic); all tests were negative. Finally, her self-image began to change. Following the initial attack, there were three more attacks outside the home. She began to feel extremely vulnerable and unsafe in the world. Her response was to avoid unsafe areas, which by that time had expanded to include the shopping mall and a bridge. Her physician could not offer her more than reassurance and a consultation with a psychiatrist. The psychiatrist recognized the signs of panic disorder and after educating the patient about the condition, prescribed phenelzine (Nardil®) in doses up to 60 mg/day. The patient was able to give up her irrational avoidances, and the attacks were controlled by the medication.

This patient was "ideal" in that the time between the onset of panic and the psychiatric consultation was weeks. On the average it takes years before panic disorder is detected in most patients. In the intervening time, patients are treated for a variety of medical ailments, always with unsatisfactory results. Some develop avoidant adaptations to their attacks ("the fear of fear").

PATHOPHYSIOLOGY

Research in the area of anxiety disorders is beginning to uncover the basis for the dysregulation seen in panic. It appears that at the level of the brain stem, the locus coeruleus may contribute to the autonomic discharge.[7] Experimentally, patients can be stimulated to produce panic by yohimbine and protected by clonidine.[8] Panic attacks also can be precipitated by the rapid infusion of sodium lactate into susceptible individuals.[9] The mechanism for this is obscure and the test is not used routinely.

Since everyone experiences anxiety and fear, it is worthwhile to ask what makes certain individuals panic-prone. It appears that panic attacks are related to primitive separation reactions that can be seen in animals and human infants. According to Klein, persons predisposed to panic have a lowered threshold for the release of separation-induced panic.[10] Hence, it is not unusual to find early separation, unresolved grief, and current marital discord in panic patients.

Although not thought to be etiological, prolapsed mitral valve is found in many patients with panic disorder.[6] This syndrome, when symptomatic, also can cause episodic chest discomfort and feelings of anxiety. Unless mitral valve prolapse strongly is suspected, an echocardiogram is not recommended for routine study of the anxiety patient. Conditions to be ruled out may include hypoglycemia, hyperthyroidism, pheochromocytoma, sedative drug withdrawal, and stimulant intoxications.

TREATMENT

The most important interventions for physicians are to recognize panic disorder, educate the patient about it, and apply appropriate counseling and drug therapies. The counseling will include exposure to feared situations, as well as attempts at resolution of active or unresolved interpersonal losses. The drug therapy should include an antipanic drug.[5] The best-known drugs for panic are imipramine (Tofranil®) and phenelzine (Nardil®). The dosages are 150 to 300 mg of imipramine and 1 mg/kg for phenelzine. Beta-blockers may help patients whose symptoms predominantly are in the cardiovascular area. Although the benzodiazepines generally are not useful in blocking panic attacks, alprazolam (Xanax®) may have antipanic properties, with fewer side effects than other drugs.[11] The patient should be treated for at least six months once a panic-blocking dosage has been reached.[5] Some patients will have a remission but many will relapse if the psychosocial stressors have not been removed. With all the drugs, the patient should be warned never to abruptly discontinue therapy.

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State Of The Art: Nonsteroidal Anti-inflammatory Drugs

Sheldon D. Solomon, M.D., Cherry Hill*

Nonsteroidal anti-inflammatory drugs are divided into families because of chemical similarities. This review highlights their proposed mechanism of action, indications, and most common toxicities. Salicylates, particularly aspirin, still are an excellent choice because of their long record of use, low cost, and predictable effects.

The nonsteroidal, anti-inflammatory drugs (NSAIDs) are valuable agents. However, at this time at least five of them have an added indication, analgesia. They are effective for such diverse pain as dysmenorrhea, headache, and odontalgia. Physicians have a wide variety of agents from which to choose (Figure 1). The agents do not lead to tolerance or physical addiction. Because of widespread usage and the recent controversy over benoxaprofen (Oraflex®) and zomepirac (Zomax®), a review of these agents' mechanism of action, indication, and toxicity is in order.

MECHANISM OF ACTION

Although the mechanism of action of these drugs is complicated and probably multifactoral, the leading hypothesis is the effect on the formation of prostaglandins. These drugs appear to decrease the body's supply of prostaglandins which are active mediators in the inflammatory process.[1] Arachidonic acid, which is released with cell injury, is rapidly converted to prostaglandins by the catalytic action of cyclo-oxygenase. The NSAIDs inhibit this step (Figure 2).

INDICATIONS

The NSAIDs are a first line of treatment in almost all inflammatory types of rheumatism such as rheumatoid arthritis, gout, spondylitic syndromes, acute bursitis, and tendonitis. In addition, we have noted clinically that they are effective in less severe inflammatory conditions such as low back strain, osteoarthritis of various joints, ligamental strain, fibrositis, and muscle spasm. Benefit here is probably via their analgesic properties.

WHICH AGENT TO USE?

There is no absolute answer to the question of what agent to use. We are fortunate to have such a wide variety of agents from which to choose since patients who fail to respond to one of these agents may respond well to another. Also, patients who have a particular side effect to one agent may not have the same reaction to another. The physician who uses these drugs is like the baseball pitcher who has a wide variety of pitches in his repertoire.

The following comments are based on "folklore" and this author's bias since good clinical trials, comparing "apples to apples," are lacking.

Salicylates are the rheumatologist's drugs of choice for anti-inflammatory effect. Aspirin is cheap, predictable, and effective. Therapeutic blood levels can be monitored by the patient's complaint of tinnitus. Silvoso et al. reported that enteric-coated aspirin did not cause as much gastric irritation while developing adequate blood salicylate levels.[2] Despite reduced

*Dr. Solomon is a rheumatologist and a member of *The Journal's* editorial board. Correspondence may be addressed to Dr. Solomon, 1860 Greentree Road, Cherry Hill, NJ 08003.

gastrointestinal side effects with enteric-coated aspirin and some of the other salicylates, the tinnitus, giddy feeling, and hearing loss often lead to discontinuance of this group of drugs. Diflunisal (Dolobid®), a relatively new compound which is a difluorphenyl derivative of salicylic acid, currently is marketed as an analgesic and as an anti-inflammatory for use in osteoarthritis. Its long half life of 11 hours allows twice daily usage. It does not seem to behave as a salicylate since blood levels cannot be measured and tinnitus rarely is a problem.

The proprionic acids such as ibuprofen (Motrin®), naproxen (Naprosyn®), and fenoprofen (Nalfon®) are good substitutes for patients with rheumatoid arthritis who have side effects to salicylates. Naprosyn's® long half life leads to better compliance with a twice-a-day dosage.

The indoleacetic acids include indomethacin (Indocin®), sulindac (Clinoril®), and tolmetin (Tolectin®). These work well in acute crystal deposition diseases (gout and pseudogout), spondyloarthropathies (ankylosing spondylitis), and soft-tissue rheumatism (bursitis). Sulindac (Clinoril®) has the advantage of twice-a-day dose leading to better compliance. Zomepirac (Zomax®) also is in this class but has little anti-inflammatory effect and presently is banned by the FDA. Indocin® has been found to be very effective in osteoarthritis of the hip.[3] I have found it helpful to use the sustained-release, 75 mg capsule (Indocin SR®) as a nighttime dose to help these groups of patients sleep through the night and awaken with less morning stiffness.

Among the newer agents, Oraflex® has been withdrawn from the market. Meclofenemate sodium (Meclomen®) is indicated for rheumatoid arthritis and osteoarthritis but frequent lower bowel toxicity limits use. Piroxicam (Feldene®) is the first of a new family of drugs known as oxicams, which appear to have great potential in the arthritides. However, Feldene® has not lived up to our expectations.

The pyrazoles as represented by phenylbutazone are very effective in both spondylitis and gout but, because of their toxicity, at present should be used as a last resort.

Generic Name	Trade Name
Salicylates	
aspirin	—
aspirin with buffering agent	Ascriptin®
choline magnesium salicylate	Trilisate®
salsalate	Disalcid®
diflunisal	Dolobid®
Phenylproprionic Acids	
ibuprofen	Motrin®
fenoprofen	Nalfon®
naproxen	Naprosyn®
naproxen Na	Anaprox®
benoxaprofen*	Oraflex®
Indoleacetic Acids	
indomethacin	Indocin®
tolmetin	Tolectin®
sulindac	Clinoril®
zomepirac**	Zomax®
Anthranilic Acids	
meclofenamate sodium	Meclomen®
Oxicams	
piroxicam	Feldene®
Pyrazolones	
phenylbutazone	Butazolidine®, Azolid®
oxyphenbutazone	Tandearil®, Oxalid®

*Permanently withdrawn from the market.
**Temporarily withdrawn from the market.

Figure 1—Nonsteroidal, anti-inflammatory agents.

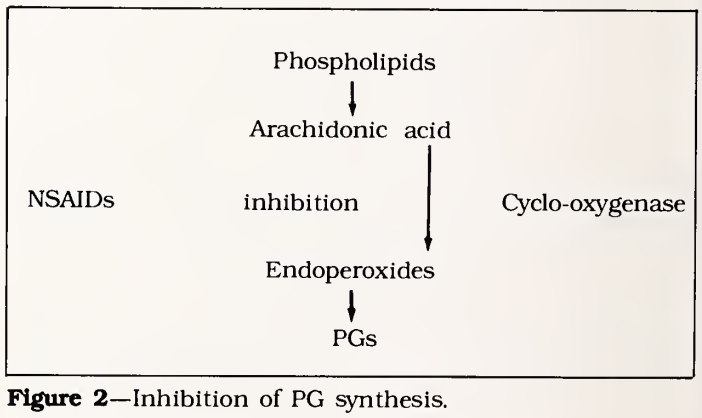


Figure 2—Inhibition of PG synthesis.

TOXICITY

Although the NSAIDs generally are well tolerated, all have the potential to cause gastrointestinal, hepatic, renal, and hematological toxicity (Table).

Upper gastrointestinal side effects are the single most common reason for discontinuance of NSAIDs. These symptoms probably occur because of decreased protection of the gastric mucosa from reduced production of prostaglandin E_2.[4] All patients should be instructed to take these drugs with or immediately following meals and to avoid other gastric irritants such as alcohol. When NSAIDs must be continued because of severe arthritis, the addition of regular doses of antacids and/or the H2 inhibitors (Zantac®, Tagamet®) may control the gastrointestinal symptomatology. Some *Medical Letter* consultants warn that Feldene®, the newest NSAID and the one with the longest half life, might accumulate in elderly patients and cause more gastrointestinal bleeding than other drugs in the class.[5]

All of these drugs, including salicylates, theoretically inhibit renal prostaglandin which helps regulate renal blood flow, glomerular filtration, and renal sodium and water excretion. For that reason fluid retention often is seen. This seems to be more of a problem in patients who have compromised renal function because of age, congestive heart failure, use of diuretics, systemic lupus erythematosis, or intrinsic renal disease. Such patients maintain renal function by producing increased levels of prostaglandins which increase renal blood flow, capillary permeability, and salt excretion. The NSAIDs interfere with these compensatory mechanisms and may lead to a deterioration of renal function. A recent paper suggests strongly that Clinoril® (sulindac) is an exception and may be used safely in

TABLE

Adverse Effects of NSAIDs

1.	Gastrointestinal
	Gastric mucosa
	Hepatic
2.	Nephrotoxic
	Fluid retention
	Renal insufficiency
	Interstitial nephritis
3.	Hematologic
	Bleeding disorders
	Agranulocytosis

patients with impairment of renal function.[6] Prompt withdrawal of the NSAID often leads to improvement in renal function in such patients. Regular monitoring of serum creatinine is mandatory in patients taking NSAIDs. In addition, an acute interstitial nephritis associated with nephrotic syndrome, which appears to be unrelated to prostaglandin inhibition, has occurred.

Liver function abnormalities, especially elevation of transaminase enzymes, are seen in up to 15 percent of patients taking NSAIDs. *Medical Letter* recommends stopping the drug if the raised level exceeds three times normal.[7] Benoxaprofen's downfall occurred after a report of five cases of fatal cholestatic jaundice.[8] Periodic liver function studies are mandatory in patients maintained on NSAIDs.

Hematologic effects include blood dyscrasias and bleeding disorders. Bone marrow toxicity has been most publicized in association with phenylbutazone but has been reported now with almost all of the NSAIDs. These problems are rare but obviously are extremely worrisome; as more experience accumulates, we may find some of the NSAIDs are less toxic to the bone marrow than others.

Other than gastrointestinal bleeding, which is multifactoral with the NSAIDs, I have found that bleeding disorders are rare. In the test tube, aspirin acetylates cyclo-oxygenase in platelets permanently. Such platelets lack a nucleus and cannot synthesize new proteins; hence cyclo-oxygenase activity is eliminated for the life of the platelet. For normal platelet function to return, new platelets must be formed from the bone marrow and this takes four to seven days. Other NSAIDs reversibly bind to cyclo-oxygenase. As the drug is cleared from the blood, dissociation from the enzyme protein restores enzyme activity. Platelet function can return to normal with short-acting agents such as Indocin® or Motrin® in a few days, but with longer-acting compounds such as Naprosyn® this could take longer, i.e. one week. Keep in mind that aspirin and phenylbutazone more than the other NSAIDs actively compete with warfarin-like drugs for protein binding sites; hence, neither agent should be used in a patient receiving anticoagulants of the warfarin family. Other NSAIDs may be used, but more frequent prothrombin times should be obtained until a new steady state is determined.

Other side effects have been reported including skin rashes, central nervous system toxicity, and allergic reactions. Keep in mind that urticaria, asthma, nasal polyposis, and anaphylactic shock can occur with all of the NSAIDs. Cross reactions do occur so that if a patient develops a true allergic reaction to one of the NSAIDs, all other NSAIDs should be avoided in most cases.

SUMMARY

The degree of confusion concerning the NSAIDs directly is proportional to the number of agents appearing on the scene. Currently, there are about 15 to 20 NSAIDs on the market with another 12 just over the horizon under FDA scrutiny. In order to reduce this confusion, the following generalizations are in order:

1. All the NSAIDs are antipyretic, anti-inflammatory, and analgesic. At present Motrin®, Nalfon®, Dolobid®, Anaprox®, and Zomax® (temporarily off the market) are approved for use as analgesics in any pain disorders.
2. The NSAIDs should be the physician's first drugs in musculoskeletal disease since they are effective and nonaddicting.
3. Since little is known about interaction with these drugs, they should not be given concomitantly; for example Naprosyn® for the patient's arthritis and Motrin® for her dysmenorrhea.
4. Aspirin still is a very effective NSAID. In high doses (3 to 4 gm/day), it gives reliable anti-inflammatory effects at much lower cost.
5. The nonacetylated salicylates probably are less toxic, require less frequent doses, but are more costly than aspirin.
6. The newer NSAIDs (nonsalicylates) probably are as effective as aspirin with less gastrointestinal and inner ear toxicity but at much higher costs.
7. The large number of agents available is very helpful therapeutically since a patient may respond well to one after failing on several others.
8. Know the minimum/maximum dose of each agent; initiate therapy with a lower dose and slowly increase if the patient is not responding. Do not jump from one agent to another without allowing for a steady state to be reached (usually a matter of weeks).
9. Allergic reactions are not uncommon. When they occur, the risk of cross reaction is high if another NSAID is tried.
10. Despite many marketing claims, it is not clear that any one NSAID is the drug of choice for any one rheumatic disease.
11. Patients taking these drugs should have periodic complete blood counts, hepatic enzymes levels, and renal function tests.

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Impaired Physicians: The Medical Family—Strengths, Weaknesses, Insuring Survival

Edward G. Reading, M.Div., Lawrenceville*

The medical family has many strengths and weaknesses. Its uniqueness requires special understanding. Insuring its survival is a goal of the Impaired Physicians Program which is concerned with prevention of impairment as well as the impaired physician.

Getting into medical school is a process that is filled with many altruistic goals; some personal, some relating to the community, and some to God. In addition, however, the competition involved creates a tremendous amount of stress. Once in medical school, the continued competition, intense study, and self-understanding as "healer" begin to create additional forms of stress. Upon graduation, the realization that "I'm responsible for a human life" creates stress. During residency years, working 80 hours a week and a lack of personal time add physical, emotional, and spiritual stresses. Additionally, many physicians learn that if they become "emotionally attached" to patients, they can suffer along with them. For this reason, many learn to control their emotions.

Paying back debts and beginning a practice can create new stresses, and may lead to work addiction—the compulsive drive to do more and more. The physician depends on high stress levels as a way of life.

Once in practice, the threat of a malpractice suit is ever present. If a suit occurs, it makes the physician and family feel as if the physician is a "bad" or incompetent doctor. If a suit is filed, there is publicity telling the public to avoid that doctor; watching a practice quickly fall apart and seeing the prestige and security of the physician and family disappear, add new stresses.

When finding a spouse, the physician has to find a very special person who understands and accepts the fact that the profession frequently will come before personal and family life. This can be viewed as marrying someone knowing there always will be another "lover."

A seemingly simple response may be self-medication with alcohol or other mood-altering drugs. This can lead to dependency, addiction, and personal and family problems.

The physician and spouse who do not learn healthy ways of understanding and coping with stress are doomed to nonpersonal relationships which can lead to divorce, to families where children are caught up in the high stresses of their parents, and to depression, anger, family violence, and suicide.

The Impaired Physicians Program and the Auxiliaries of the Medical Society of New Jersey and the New Jersey Association of Osteopathic Physicians are cosponsoring a one-day seminar geared to leading healthy, happy lives. This seminar, "The Medical Family: Its Strengths, Its Weaknesses and Insuring Its Survival," will be held on Sunday, March 24, 1985. A raffle to benefit the Treatment Loan Fund of the Impaired Physicians Program will be held. The registration application is on the following page.

*Rev. Reading is Assistant Director, Impaired Physicians Program, MSNJ. Correspondence may be addressed to Rev. Reading, MSNJ, Two Princess Road, Lawrenceville, NJ 08648.

THE MEDICAL FAMILY
ITS STRENGTHS, ITS WEAKNESSES AND INSURING ITS SURVIVAL

Sunday, March 24, 1985
9:30 a.m.

The Impaired Physicians Program and the Auxiliaries to the Medical Society of New Jersey and the New Jersey Association of Osteopathic Physicians and Surgeons invite you and your spouse to attend this day of enlightenment. Topics to be addressed include:

THE PHYSICIAN'S FAMILY—STRENGTHS AND WEAKNESSES

THE IMPAIRED PHYSICIAN

THE IMPAIRED PHYSICIAN'S FAMILY AND FAMILY THERAPY

THE EMOTIONAL IMPACT OF A MALPRACTICE SUIT ON THE PHYSICIAN AND THE PHYSICIAN'S FAMILY

GEARING UP FOR RETIREMENT

THE PHYSICIAN AND THE PHYSICIAN'S FAMILY—SURVIVAL AND SOLUTIONS

GUEST SPEAKERS
M.O. Vincent, M.D., Ontario, Canada
Sara Charles, M.D., University of Illinois
Frank C. Snope, M.D., Piscataway, New Jersey

Application has been made for CME Credit Hours!

REGISTRATION FORM
THE MEDICAL FAMILY

Please print

Name(s) of those to attend _____

Address _____

Telephone _____

[ ] Enclosed is my check for $15. This will cover my registration only.
[ ] Enclosed is my check for $25. My spouse will accompany me.

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PLEASE COMPLETE AND RETURN YOUR REGISTRATION FORM AS SOON AS POSSIBLE. SPACE IS LIMITED!!!

Return to: **Impaired Physicians Program**
c/o Medical Society of New Jersey
2 Princess Road
Lawrenceville, New Jersey 08648

DOCTOR'S NOTEBOOK

Trustees' Minutes; UMDNJ Notes; AMNJ Report; Physicians Seeking Location in New Jersey

Trustees' Minutes December 16, 1984

A regular meeting of the Board of Trustees was held on Sunday, December 16, 1984, at the Executive Offices in Lawrenceville. Detailed minutes are on file with the secretary of your county society. A summary of significant actions follows:

Report of the President . . .
(1) Role of Officers of MSNJ at County Medical Society Meetings . . . Noted that one of the key roles of MSNJ officers is to communicate to members the MSNJ position on current issues facing the membership.

Report of Executive Director . . .
(1) MSNJ Paid Membership . . . Noted that there were 7,578 dues-paying members as of November 30, 1984.
(2) Review of MSNJ Financial Statements . . . Approved the financial statements for the periods ending October 31 and November 30, 1984; noted that expenses for attendance of Hospital Medical Staff Section chairman at AMA meetings would be in the next budget.
(3) State of New Jersey Reinsurance Association Deficit . . . Noted that the Committee studying the State Reinsurance Association will recommend that the deficit of the Association be charged to those physicians insured by the Association. Also, noted that this Committee is to study the malpractice problem; persons with suggestions should contact Drs. Riggs, Fares, or Doyle.
(4) AMA Litigation—Medicare . . . Noted the structure of the AMA litigation against the Deficit Reduction Act; the trial will begin in mid-January.
(5) Peer Review Organization . . .
(a) Legislation . . . Approved a recommendation for MSNJ to hold three regional meetings for the purpose of conducting a forum on the PRO issue. Also, noted that members of the Ad Hoc Committee To Review PRO Criteria include: Drs. Krosnick, Fleisher, Kristeller, Ratner, Reilly, Rush, Sachs, Saroff, and Paine.
(b) Hospital Contracts . . . Noted that Mr. Maressa has reviewed with the staff of the NJ Hospital Association the most current draft of their master contract with the PRO of New Jersey.
(6) Litigation . . .
Hospital's Right To Deny Reappointment . . . Noted that phone calls were received regarding the article in *Medical Economics* (December 10, 1984) relating a case alleged to have been litigated in New Jersey Superior Court.
(7) Physician Medicare Reimbursement in Rehabilitation Hospitals . . . Advised that Prudential will adjust initial screening criteria if physicians specializing in rehabilitation medicine and the rehabilitation hospital can show that the screens were inappropriate.
(8) Federal Trade Commission *v* MSNJ . . . Noted that the investigator submitted his report with the recommendation that the file be closed.
(9) Subordinated Loan Certificates—Internal Revenue Service . . . Noted that case still is pending.

UMDNJ . . . Received a report from Dr. Bergen noting the following: UMDNJ name change will be deferred for at least 30 days; Dr. Bergen will give the first State of the University Address on January 16, 1985; New Jersey's students scored well above the average on the National Boards; and the Board of ECFMG is moving forward with their clinical skills test.

NJ Hospital Association . . .
(1) Medicare Waiver . . . Noted that the outcome of the new waiver still is being negotiated between the White House and the State House.
(2) Eliminate State's Dependence on a Waiver . . . Noted that NJHA is exploring a number of alternatives for the financing of uncompensated care without a waiver.
(3) TEFRA—Compliance and Implications . . . Noted the Department of Health will propose a methodology to the Hospital Rate-setting Commission for complying with HCFA's requirements and has not proposed applying this treatment to the other payers.
(4) PRO Contract . . . Noted that a proposed model agreement that hospitals would use to negotiate the agreements they must have with PROs almost is finalized.
(5) Licensure and Certification . . . Noted that NJHA actively is supporting S-2282/A-2554 which would review all licensure requests, weighing them against nationally recognized criteria.
(6) Indigent Care . . . Noted that the New Jersey legislature is looking into expanding its current Medicaid program to include all individuals who currently are not covered under the existing program, i.e. the medically needy.

Council on Medical Services . . .
(1) 1983 House of Delegates—Resolutions #14, #15, and #16 . . . Did not approve the following recommendation:

> That the Board of Trustees strongly protest the legislation that now governs the generic prescribing system on the grounds that it has the potential to affect adversely the quality of medical care and increase physician liability in prescribing drugs over which he has very little control.

(2) Medicare and Medicaid's Denial of Payment for Hospital and Attending Physician Care . . . Approved the following recommendation:

> That the Board of Trustees protest the delay in requesting a refund from John J. Crosby, Jr., M.D., and supports and

urges that a reconsideration hearing be granted in this matter.

Note: The Council reviewed correspondence regarding Medicaid's denial for payment of Dr. Crosby's services as attending physician because the hospital claim for the corresponding period was denied.

(3) Expiration Date on Prescription Labels: Approved the following resolution:

Whereas, all prescribed medications have expiration dates; and

Whereas, many patients do not complete their total amount of prescribed medication for a particular illness or injury, therefore leaving some prescribed medication unused; and

Whereas, this unused prescribed medication may be taken at a later date for the same or similar condition, by the same patient or someone else; and

Whereas the expiration date of these prescribed medications may have passed; and

Whereas, these unused prescribed medications may not be indicated for this particular use by the patient; and

Whereas, this use by the patient may be not only ineffectual but harmful; now therefore be it

Resolved, that all agencies dispensing prescribed medications be required by law or regulations to place the expiration date of the prescribed medication on the label of the container.

Council on Public Relations . . . Noted that regarding the Union County public relations proposal, the AMA has prepared brochures and posters on the new Medicare regulations.

Old Business . . .

(1) Chiropractic Scope Regulations . . . Noted that an editorial in the January issue of *The Journal* by Dr. Arthur Krosnick makes reference to the problem of the State Board's amendment to the chiropractic scope regulation.

(2) AFL-CIO Meeting on Health Care Costs . . . Requested the President and Executive Director to obtain information and take whatever action they deem appropriate about the labor-designed HMO-PPO concept with the hospitals in New Jersey.

New Business . . .

(1) Position Statement on Physician DRGs . . . Adopted the position paper submitted by Paul J. Hirsch, M.D., regarding physician DRGs. (A copy of the statement appears on page 111).

(2) Public Hearing on DRGs . . . Noted that a second public hearing on DRGs will be held in Perth Amboy.

UMDNJ Notes

Stanley S. Bergen, Jr., M.D.
President

Disquieting findings about the doubled likelihood of a possibly precancerous abnormality in women exposed to DES (diethylstilbestrol) have been reported by one of our faculty members.

The results of a seven-year study led by Stanley J. Robboy, M.D., chairman of pathology at UMDNJ-New Jersey Medical School, were discussed at a Newark campus news conference and published in the December 7, 1984, issue of the *Journal of the American Medical Association.* The study, part of the National Collaborative Diethylstilbestrol-Adenosis (DESAD) Project, was completed while Dr. Robboy was at Massachusetts General Hospital in Boston.

The incidence of dysplasia, tissue abnormalities identified as a precursor of the most common forms of cervical and vaginal cancer, was 15.7 cases per 1,000 for women whose mothers took DES to prevent miscarriage, compared to 7.9 cases per 1,000 among a control group of women not exposed, Dr. Robboy found. The use of DES to prevent miscarriage has been banned since the early 1970s because the drug was linked to a rare form of vaginal cancer developing in DES daughters.

Dr. Robboy told reporters that the study presented the most conclusive proof to date that the risk of dysplasia and certain venereal diseases increased with the number of sexual partners among both DES-exposed and unexposed women.

The research study will continue to follow the approximately 5,000 women who participated in this aspect of the DESAD Project.

The commitment of UMDNJ to become a major research force in medical education is reflected in 1984 being a banner year for research grants, showing a 23.4 percent increase over the previous year.

For the year ended June 30, 1984, 374 research grants were received for a total value of $14,823,000. The previous year showed 338 grants for $12 million. Ten years ago the direct costs of funded research programs at the University amounted to only $4.6 million.

One of our larger research efforts is the study of collagen at UMDNJ-Rutgers Medical School. Darwin J. Prockop, M.D., Ph.D., professor and chairman of the department of biochemistry at the Piscataway school, recently received a five-year $2.5 million grant from the National Institutes of Health to continue his collagen research.

The Prockop group has focused its attention on osteogenesis imperfecta, the rare inherited disorder of children known as "brittle bone disease." The collagen genes, which have major defects in children afflicted with osteogenesis imperfecta, may have minor mutations which predispose individuals to develop osteoporosis, arthritis, and similar ailments later in their adult life, the researchers have suggested.

By the time you read this, the first electronic ear implanted in New Jersey may be bringing new hearing to a deaf person.

In December 1984, the Food and Drug Administration approved gen-

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eral use of the cochlear implant, developed by Dr. William House of Los Angeles and subjected to six years of design and testing. The implant enables previously deaf persons to hear the sounds of auto horns, telephones, and smoke alarms, but not to distinguish the sounds of spoken words.

Dr. Anthony F. Jahn, associate professor of surgery and director of otolaryngology at UMDNJ-New Jersey Medical School, immediately began preparations and evaluations to perform the first implant at University Hospital in Newark.

In another development, University Hospital has received three-year accreditation from the Joint Commission on the Accreditation of Hospitals. The note to the core teaching hospital of UMDNJ-New Jersey Medical School was received by Leonard Lopez, UMDNJ vice-president and chief executive officer of the hospital.

AMNJ Report

Robert S. Rigolosi, M.D.
President

The Academy's 1983 Internal Medicine Review Course began on January 16, 1985, and will run for 19 successive Wednesdays from 3:00 to 6:00 P.M. Dr. Michael Bernstein is program chairman and the course is being held at Overlook Hospital, Summit. The course is designed to provide a comprehensive review of contemporary concepts in internal medicine and is directed at practicing internists and family practitioners.

On Saturday, January 19, 1985, the Academy held a retreat for its Board of Trustees at the Parsippany Hilton, Morris County. The overall purpose of the event was to reflect on the Academy's current position and explore future direction. An experienced facilitator was employed to direct our efforts and to help develop a statement of future direction which would maintain our current significant growth and success.

The fourth First Wednesday at the Academy luncheon meeting of the year was held on Wednesday, February 6, 1985, at 12 noon at the Executive Offices. Our guest speaker was Dr. William J. "Terry" Kane, Vice-President and Medical Director of HMO of New Jersey. The topic was "The Importance of HMO's on the Future Practice of Medicine." The fifth meeting of the year will be held on Wednesday, March 6. Dr. Robert Cassidy will be our guest speaker and he will address biomedical ethics issues including the terminally ill and aged. Professor Cassidy is a faculty member of Rutgers Medical School and is a consultant to the MSNJ Committee on Biomedical Ethics.

The Academy's new Public Education Speaker's Bureau officially began in September with 83 speakers and 70 topics. Since publicity announcements were released, 11 requests for speakers have been received at the Executive Offices. Although the program is running smoothly, speakers are needed from the northern-most and southern-most counties. Interested participants should send their names, addresses, and topics along with any geographic or time restrictions on participation.

Physicians Seeking Location in New Jersey

The following physicians have written to the Executive Offices of MSNJ seeking information on possible opportunities for practice in New Jersey. The information listed below has been supplied by the physician. If you are interested in any further information concerning these physicians, we suggest you make inquiries directly to them.

ALLERGY—Narciso P. Mendoza, M.D., 1 Dodd Ter., Verona, NJ 07044. UERMMMC (Philippines) 1974. Board eligible. Also, immunology. Solo, partnership, group. Available.

ANESTHESIOLOGY—P. Poovendran, M.D., Box 35, Westchester County Medical Center, Valhalla, NY 10595. Ceylon (Sri-Lanka) 1974. Board eligible. Group or partnership. Available June 1985.

CARDIOLOGY—John T. Cardone, M.D., 1035 Southern Artery, Apt. 707, Quincy, MA 02169. SUNY-Buffalo 1980. Board certified. Partnership or group. Available July 1985.

DERMATOLOGY—Catherine A. Nordby, M.D., 871 Beaconsfield, Grosse Pointe Park, MI 48230. St. Louis 1980. Board eligible. Specialty or multispecialty group. Available July 1985.

EMERGENCY MEDICINE—Gerard B. Martin, M.D., 871 Beaconsfield, Grosse Pointe Park, MI 48230. St. Louis 1980. Board eligible. Teaching hospital with emergency medicine residency or trauma center with research potential. Available July 1985.

FAMILY MEDICINE—Alena Bilek, M.D., 2600 Netherland Ave., Apt. 2808, Bronx, NY 10463. Charles (Czechoslovakia) 1970. Group or partnership. Available July 1985.

Francis C. Imbarrato, M.D., 505 Hawthorne Ave., Williamsport, PA 17701. Guadalajara (Mexico) 1981. Board eligible. Solo, associate, partnership, group, HMO. Available July 1986.

GASTROENTEROLOGY—Ronald J. Cirillo, M.D., 7 Sandpiper Dr., Voorhees, NJ 08043. Guadalajara (Mexico) 1978. Also, internal medicine. Board eligible (IM). Any type practice. Available July 1985.

James D. Kutch, M.D., 323 Obispo Ave., #207, Long Beach, CA 90814. UMDNJ 1979. Board eligible. Board certified (IM). Group or partnership. Available July 1985.

Steven M. Samuels, M.D., 4908 David Ct., Cincinnati, OH 45215. Louvain (Belgium) 1980. Also, internal medicine. Board certified (IM). Group or partnership. Available July 1985.

HEMATOLOGY—Hoon Park, M.D., 112 W. 65 St., Apt. 3, Westmont, IL 60559. Kyung Hee (Korea) 1973. Board certified (IM). Also, internal medicine. Solo, group, partnership, institution. Available July 1985.

IMMUNOLOGY—Narciso P. Mendoza, M.D., 1 Dodd Ter., Verona, NJ 07044. UERMMMC (Philippines) 1974. Board eligible (AL). Also, allergy. Solo, partnership, group. Available.

INTERNAL MEDICINE—Kurt N. Bausback, M.D., 415 S. Van Pelt St., Apt. D-4, Philadelphia, PA 19146. Stanford 1982. Board eligible. Group, multispecialty, hospital, emergency center. Available July 1985.

John T. Cardone, M.D., 1035 Southern Artery, Apt. 707, Quincy, MA 02169. SUNY-Buffalo 1980. Board certified. Also, cardiology. Partnership or group. Available.

Ronald J. Cirillo, M.D., 7 Sandpiper Dr., Voorhees, NJ 08043. Guadalajara (Mexico) 1978. Subspecialty, gastroenterology. Board eligible. Any type practice. Available July 1985.

Phillip A. Lecso, M.D., 5138 Regency Dr., Toledo, OH 43615. Medical College of Ohio 1982. Board eligible. Single, multispecialty group, partnership. Available July 1985.

Narain D. Mangila, M.D., 4111 Crenshaw Dr., Corpus Christi, TX 78413. Medical School of New Delhi (India) 1972. Solo. Available July 1985.

Dominic Mazzocchi, M.D., 1231 E. 89th St., Brooklyn, NY 11236. Puerto Rico 1981. Board eligible. Group or partnership. Available January 1985.

Richard Narvaez, M.D., 516 Berkley Rd., Narberth, PA 19072. Temple 1982.

Group, partnership, HMO, solo. Available July 1985.

Hoon Park, M.D., 112 W. 65 St., Apt. 3, Westmont, IL 60559. Kyung Hee (Korea) 1973. Board certified. Also, hematology. Solo, group, partnership, institution. Available July 1985.

Steven M. Samuels, M.D., 4908 David Ct., Cincinnati, OH 45215. Louvain (Belgium) 1980. Subspecialty, gastroenterology. Board certified. Group or partnership. Available July 1985.

Jerrold P. Schwartz, M.D., 69 Gold St., Apt. 12-C, New York, NY 10038. Dijon (France) 1982. Group, clinic, hospital-based, long-term care. Available July 1985.

Lewis B. Zimet, M.D., 4313 Carambola Circle S., Coconut Creek, FL 33066. Far Eastern (Philippines) 1981. Board eligible. Solo, group, partnership, industrial, hospital-based. Available.

OBSTETRICS/GYNECOLOGY—Karen S. Juske, M.D., 21 W. 276 Crescent Blvd., Glen Ellyn, IL 60137. Stritch-Loyola 1977. Board certified. Group, HMO, family planning clinic. Available.

OTOLARYNGOLOGY—Leonid E. Super, M.D., 1910 59th St., Brooklyn, NY 11204. Chernovey (USSR) 1952. Group, partnership, HMO. Available.

PATHOLOGY—Joseph W. Depenbusch, M.D., University of Wisconsin Hospital, 600 Highland Ave., Madison, WI 53792. Iowa 1981. Board eligible. Available July 1985.

PEDIATRICS—Noah Barysh, M.D., 603A Old Nassau Rd., Jamesburg, NJ 08831. Chicago 1933. Board certified. Part time, 15 hrs/wk. Available.

Suhaila Siddiqi Hussain, M.D., 104 Running Brook Rd. East, Ewing, NJ 08638. Baghdad (Iraq) 1979. Board eligible. Group, partnership, solo. Available.

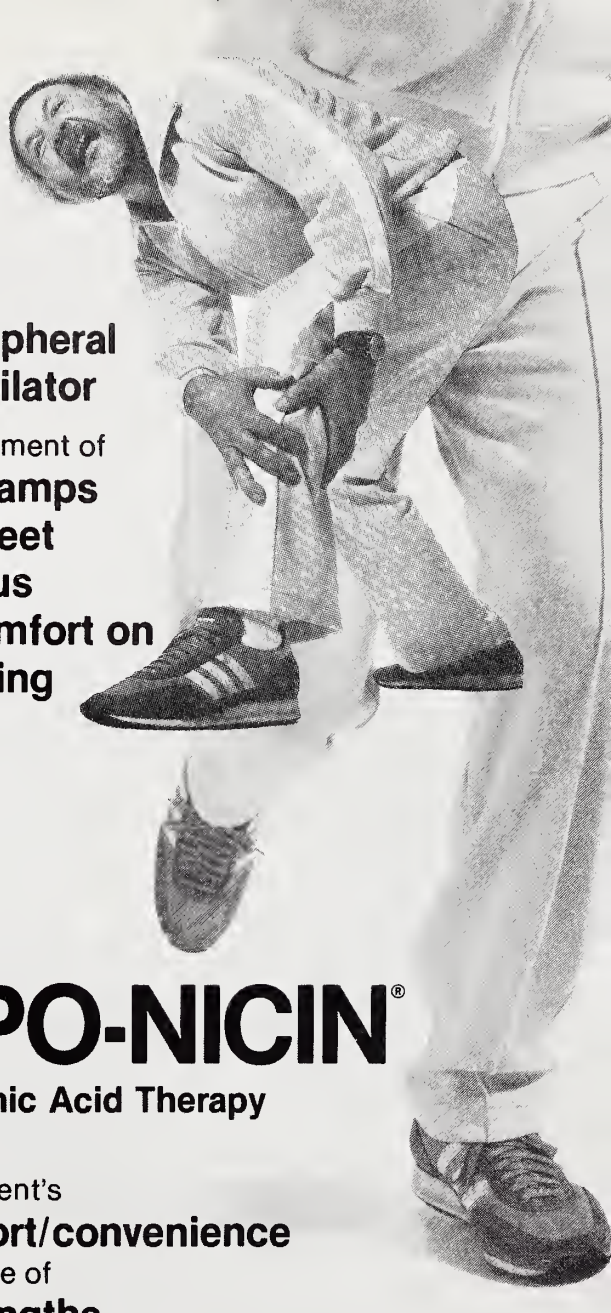
Kirti Vora, M.D., 41 E. White Ter., Nutley, NJ 07110. Baroda (India) 1975. Board certified. Group, partnership, staff position. Available.

PHYSICAL MEDICINE/REHABILITATION—Minaxi Vora, M.D., 41 E. White Ter., Nutley, NJ 07001. M.P. Shah (India) 1975. Group, partnership, solo, staff position. Available.

RADIOLOGY—Martin J. Lachman, M.D., 4040 Ford Rd., Philadelphia, PA 19131. Temple 1966. Board certified. Group, partnership, hospital. Available.

Richard Steinberg, M.D., 3701 Lindell Blvd., St. Louis, MO 63108. SUNY-Downstate 1980. Board eligible. Hospital-based or group-based practice with emphasis on CT and ultrasound. Available July 1985.

UROLOGY—Bharat R. Shah, M.D., 2610 Michaels Dr., Temple, TX 76502. BJ Medical (India) 1968. Board eligible. Solo, group, partnership, multi-specialty, academic. Available.



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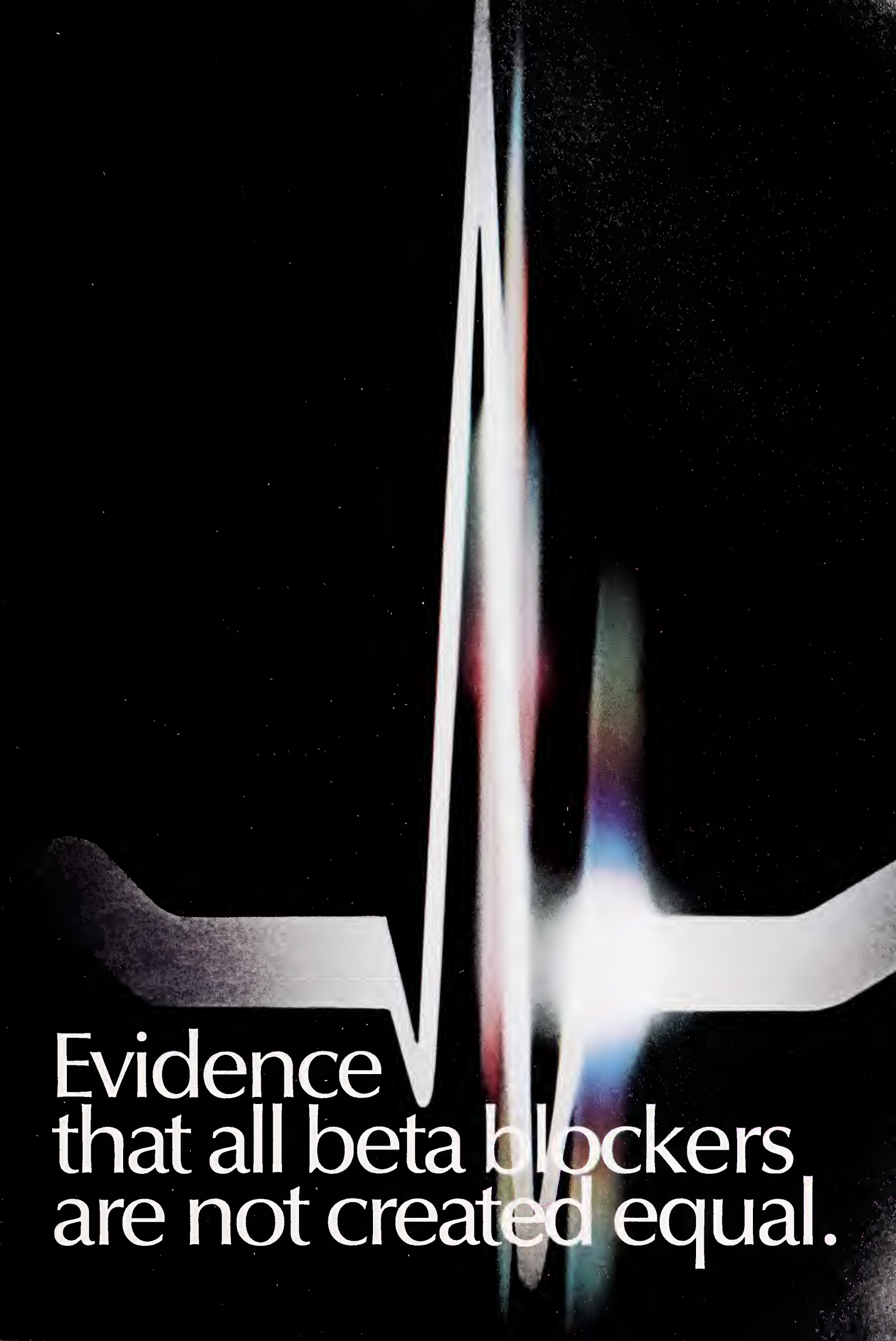
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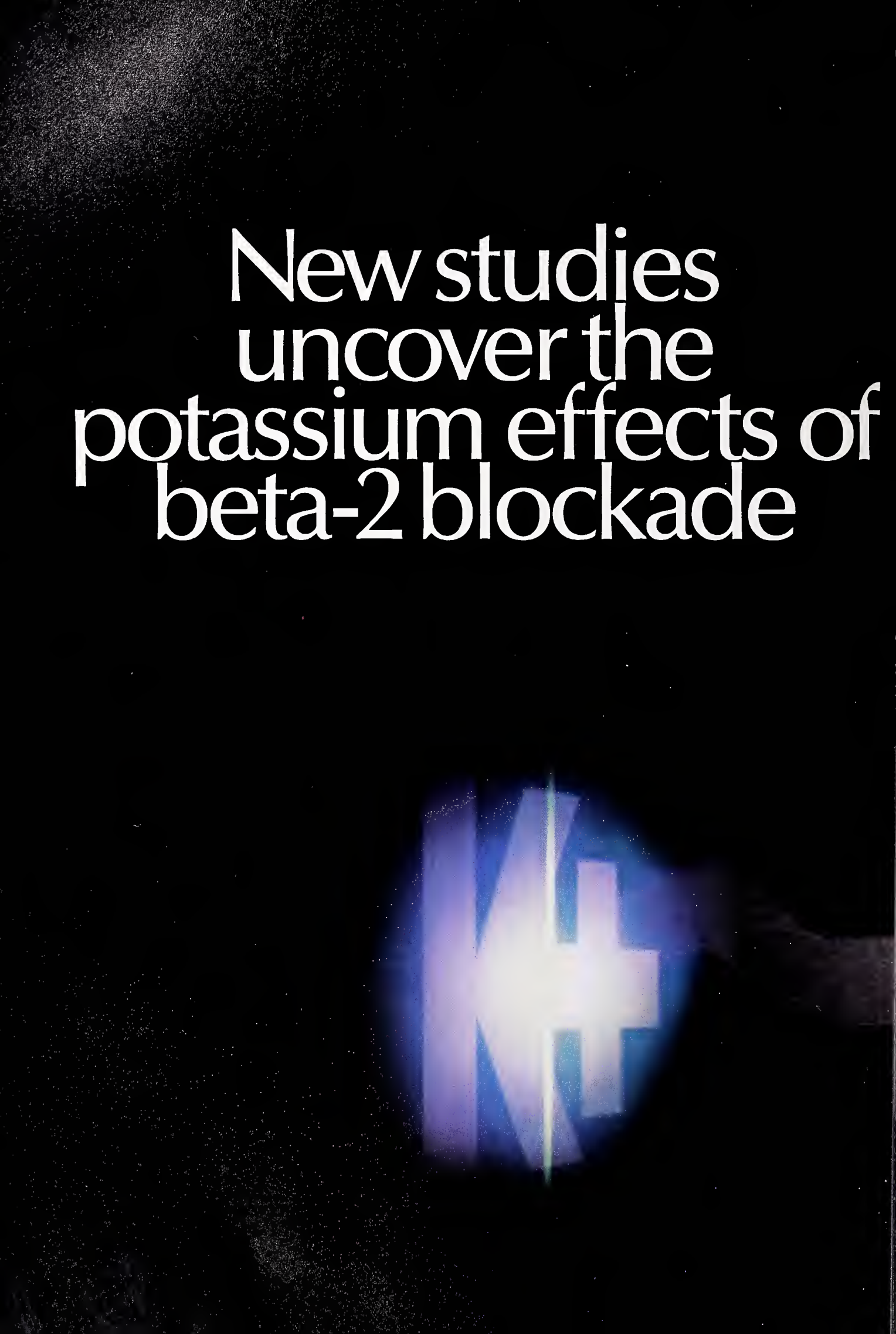
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are not created equal.

New studies uncover the potassium effects of beta-2 blockade



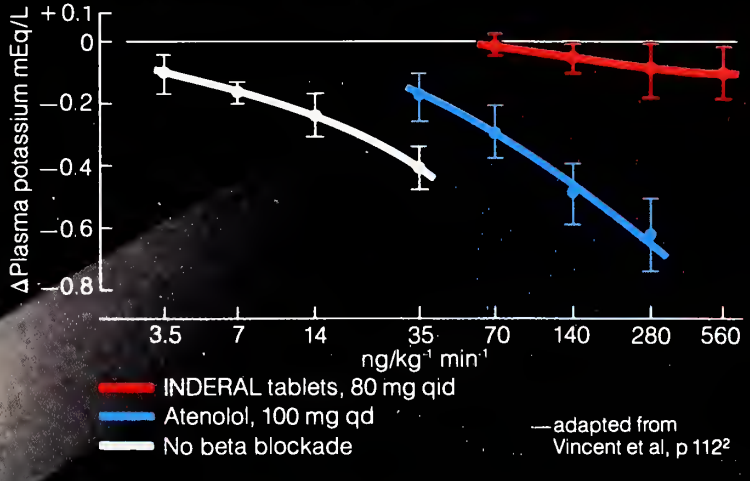
Clinical pharmacology data from the *New England Journal of Medicine:*

"...when normal young men are given infusions of epinephrine at levels such as those that circulate in patients with myocardial infarction, their serum potassium concentrations fall by about 0.8 mmol per liter. Hypokalemia is prevented by...beta-2 blockade."[1]

INDERAL (propranolol HCl) prevented beta-2 mediated hypokalemia

In a pharmacological study comparing INDERAL with atenolol, 10 hypertensive patients were infused with the nonselective beta agonist, isoproterenol, which also stimulates beta-2 mediated hypokalemia. At doses high enough to overcome beta-1 mediated heart rate reductions, the hypokalemia caused by isoproterenol was blunted by INDERAL, but not by atenolol.[2]

INDERAL compared with atenolol: change in plasma potassium after beta-agonist infusion[2]



—adapted from Vincent et al, p 112[2]

For beta-1/beta-2 blockade INDERAL® (PROPRANOLOL HCl) TABLETS

Please see last page for brief summary of prescribing information.

Epinephrine-induced hypokalemia can intensify diuretic-induced hypokalemia



From the *Lancet:*

"Although both diuretics and adrenaline are known to cause hypokalaemia, we believe that this is the first demonstration that these two factors can act in an additive manner. Routine monitoring of serum potassium in patients on thiazide diuretics may underestimate the risks of hypokalaemia."[3]

Epinephrine drives potassium into cells—an effect that has been shown to be under beta-2 receptor control[4]; thiazides promote excretion of potassium. When these actions occur together, hypokalemia can intensify significantly.[3]

Epinephrine-induced hypokalemia can cause ECG abnormalities typical of other forms of hypokalemia

In a study of the effects of epinephrine-induced hypokalemia on the electrocardiogram, it was shown that levels of plasma epinephrine similar to those observed during myocardial infarction can produce changes in ventricular repolarization, which are reflected in T-wave flattening and QT prolongation in normal subjects.[5]

In clinical pharmacology studies of hypertensive and normal patients, epinephrine-induced hypokalemia was prevented by beta-2 blockade.[2,4]

For beta-1/beta-2 blockade

INDERAL®
(PROPRANOLOL HCl) TABLETS

Please see last page for brief summary of prescribing information.

Right from the start in hypertension...



Once-daily INDERAL LA (propranolol HCl) for smooth blood pressure control without the potassium problems of diuretics

Patients with "uncomplicated" hypertension may develop ventricular arrhythmias in the presence of hypokalemia.[6] Once-daily INDERAL LA maintains smooth blood pressure reductions without a negative effect on serum potassium and provides patients with broad cardiovascular benefits–all in a convenient daily dose.

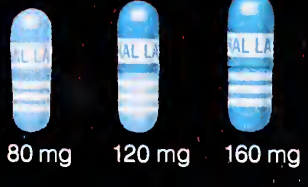
Like conventional INDERAL tablets, INDERAL LA should not be used in the presence of congestive heart failure, sinus bradycardia, heart block greater than first degree, and bronchial asthma.

And for lifetime benefits in foundation treatment of angina

Once-daily INDERAL LA provides 24-hour control of angina symptoms–plus the cardiovascular benefits of the world's leading beta blocker. And unlike calcium channel blockers, INDERAL LA, alone or with a nitrate, is recommended for first-line treatment of stable angina.

Simply start new patients on 80 mg INDERAL LA once daily. Dosage may be increased to 160 mg once daily to achieve maximal control.

Once-daily
INDERAL® LA
(PROPRANOLOL HCl) LONG ACTING CAPSULES
In HYPERTENSION and ANGINA



The appearance of these capsules is a registered trademark of Ayerst Laboratories.
Please see last page for brief summary of prescribing information.

INDERAL®
(PROPRANOLOL HCl) TABLETS



10 mg 20 mg 40 mg 60 mg 80 mg 90 mg

The appearance of these tablets is a registered trademark of Ayerst Laboratories.

Once-daily INDERAL® LA
(PROPRANOLOL HCl) LONG ACTING CAPSULES



The appearance of these capsules is a registered trademark of Ayerst Laboratories.

BRIEF SUMMARY *(FOR FULL PRESCRIBING INFORMATION, SEE PACKAGE CIRCULARS.)*

INDERAL® (propranolol hydrochloride) **Tablets and Injectable**
INDERAL® LA (propranolol hydrochloride) **Long Acting Capsules**

INDICATIONS AND USAGE—INDERAL Tablets

Hypertension: INDERAL (propranolol hydrochloride) is indicated in the management of hypertension. It may be used alone or used in combination with other antihypertensive agents, particularly a thiazide diuretic. INDERAL is not indicated in the management of hypertensive emergencies.

Angina Pectoris Due to Coronary Atherosclerosis: INDERAL is indicated for the long-term management of patients with angina pectoris.

Cardiac Arrhythmias:

1.) Supraventricular arrhythmias

a) Paroxysmal atrial tachycardias, particularly those arrhythmias induced by catecholamines or digitalis or associated with the Wolff-Parkinson-White syndrome. (See W-P-W under WARNINGS.) b) Persistent sinus tachycardia which is noncompensatory and impairs the well-being of the patient. c) Tachycardias and arrhythmias due to thyrotoxicosis when causing distress or increased hazard and when immediate effect is necessary as adjunctive, short term (2-4 weeks) therapy. May be used with, but not in place of, specific therapy. (See Thyrotoxicosis under WARNINGS.) d) Persistent atrial extrasystoles which impair the well-being of the patient and do not respond to conventional measures. e) Atrial flutter and fibrillation when ventricular rate cannot be controlled by digitalis alone, or when digitalis is contraindicated.

2.) Ventricular tachycardias

Ventricular arrhythmias do not respond to propranolol as predictably as do the supraventricular arrhythmias. a)Ventricular tachycardias. With the exception of those induced by catecholamines or digitalis, INDERAL is not the drug of first choice. In critical situations when cardioversion technics or other drugs are not indicated or are not effective, INDERAL may be considered. If, after consideration of the risks involved, INDERAL is used, it should be given intravenously in low dosage and very slowly. (See DOSAGE AND ADMINISTRATION.) *Care in the administration of* INDERAL *with constant electrocardiographic monitoring is essential as the failing heart requires some sympathetic drive for maintenance of myocardial tone.* b) Persistent premature ventricular extrasystoles which do not respond to conventional measures and impair the well-being of the patient.

3.) Tachyarrhythmias of digitalis intoxication

If digitalis-induced tachyarrhythmias persist following discontinuance of digitalis and correction of electrolyte abnormalities, they are usually reversible with oral INDERAL. Severe bradycardia may occur. (See OVERDOSAGE.) Intravenous propranolol hydrochloride is reserved for life-threatening arrhythmias. Temporary maintenance with oral therapy may be indicated. (See DOSAGE AND ADMINISTRATION in the package circulars.)

4.) Resistant tachyarrhythmias due to excessive catecholamine action during anesthesia. Tachyarrhythmias due to excessive catecholamine action during anesthesia may sometimes arise because of release of endogenous catecholamines or administration of catecholamines. When usual measures fail in such arrhythmias, INDERAL may be given intravenously to abolish them. All general inhalation anesthetics produce some degree of myocardial depression. Therefore, when INDERAL (propranolol hydrochloride) is used to treat arrhythmias during anesthesia, it should be used with extreme caution and constant ECG and central venous pressure monitoring. (See WARNINGS.)

Myocardial Infarction: INDERAL is indicated to reduce cardiovascular mortality in patients who have survived the acute phase of myocardial infarction and are clinically stable.

Migraine: INDERAL is indicated for the prophylaxis of common migraine headache. The efficacy of propranolol in the treatment of a migraine attack that has started has not been established and propranolol is not indicated for such use.

Hypertrophic Subaortic Stenosis: INDERAL is useful in the management of hypertrophic subaortic stenosis, especially for treatment of exertional or other stress-induced angina, palpitations, and syncope. INDERAL also improves exercise performance. The effectiveness of propranolol hydrochloride in this disease appears to be due to a reduction of the elevated outflow pressure gradient which is exacerbated by beta receptor stimulation. Clinical improvement may be temporary.

Pheochromocytoma: After primary treatment with an alpha-adrenergic blocking agent has been instituted, INDERAL may be useful as *adjunctive* therapy if the control of tachycardia becomes necessary before or during surgery.

It is hazardous to use INDERAL unless alpha-adrenergic blocking drugs are already in use, since this would predispose to serious blood pressure elevation. Blocking only the peripheral dilator (beta) action of epinephrine leaves its constrictor (alpha) action unopposed.

In the event of hemorrhage or shock, there is a disadvantage in having both beta and alpha blockade since the combination prevents the increase in heart rate and peripheral vasoconstriction needed to maintain blood pressure.

With inoperable or metastatic pheochromocytoma, INDERAL may be useful as an adjunct to the management of symptoms due to excessive beta receptor stimulation.

INDICATIONS AND USAGE—INDERAL LA Long Acting Capsules

Hypertension: INDERAL LA (propranolol hydrochloride) is indicated in the management of hypertension; it may be used alone or used in combination with other antihypertensive agents, particularly a thiazide diuretic. INDERAL LA is not indicated in the management of hypertensive emergencies.

Angina Pectoris Due to Coronary Atherosclerosis: INDERAL LA is indicated for the long-term management of patients with angina pectoris.

Migraine: INDERAL LA is indicated for the prophylaxis of common migraine headache. The efficacy of propranolol in the treatment of a migraine attack that has started has not been established and propranolol is not indicated for such use.

Hypertrophic Subaortic Stenosis: INDERAL LA is useful in the management of hypertrophic subaortic stenosis, especially for treatment of exertional or other stress-induced angina, palpitations, and syncope. INDERAL LA also improves exercise performance. The effectiveness of propranolol hydrochloride in this disease appears to be due to a reduction of the elevated outflow pressure gradient which is exacerbated by beta-receptor stimulation. Clinical improvement may be temporary.

CONTRAINDICATIONS. INDERAL and INDERAL LA are contraindicated in 1) cardiogenic shock; 2) sinus bradycardia and greater than first degree block; 3) bronchial asthma; 4) congestive heart failure (see WARNINGS) unless the failure is secondary to a tachyarrhythmia treatable with INDERAL.

WARNINGS. CARDIAC FAILURE: Sympathetic stimulation may be a vital component supporting circulatory function in patients with congestive heart failure, and its inhibition by beta blockade may precipitate more severe failure. Although beta blockers should be avoided in overt congestive heart failure, if necessary, they can be used with close follow-up in patients with a history of failure who are well compensated and are receiving digitalis and diuretics. Beta-adrenergic blocking agents do not abolish the inotropic action of digitalis on heart muscle.

IN PATIENTS WITHOUT A HISTORY OF HEART FAILURE, continued use of beta blockers can, in some cases, lead to cardiac failure. Therefore, at the first sign or symptom of heart failure, the patient should be digitalized and/or treated with diuretics, and the response observed closely, or INDERAL should be discontinued (gradually, if possible).

IN PATIENTS WITH ANGINA PECTORIS, there have been reports of exacerbation of angina and, in some cases, myocardial infarction, following abrupt discontinuance of INDERAL (propranolol hydrochloride) therapy. Therefore, when discontinuance of INDERAL is planned the dosage should be gradually reduced over at least a few weeks, and the patient should be cautioned against interruption or cessation of therapy without the physician's advice. If INDERAL therapy is interrupted and exacerbation of angina occurs, it usually is advisable to reinstitute INDERAL therapy and take other measures appropriate for the management of unstable angina pectoris. Since coronary artery disease may be unrecognized, it may be prudent to follow the above advice in patients considered at risk of having occult atherosclerotic heart disease who are given propranolol for other indications.

Nonallergic Bronchospasm (e.g., chronic bronchitis, emphysema)— PATIENTS WITH BRONCHOSPASTIC DISEASES SHOULD IN GENERAL NOT RECEIVE BETA BLOCKERS. INDERAL should be administered with caution since it may block bronchodilation produced by endogenous and exogenous catecholamine stimulation of beta receptors.

MAJOR SURGERY: The necessity or desirability of withdrawal of beta-blocking therapy prior to major surgery is controversial. It should be noted, however, that the impaired ability of the heart to respond to reflex adrenergic stimuli may augment the risks of general anesthesia and surgical procedures.

INDERAL, like other beta blockers, is a competitive inhibitor of beta-receptor agonists and its effects can be reversed by administration of such agents, e.g., dobutamine or isoproterenol. However, such patients may be subject to protracted severe hypotension. Difficulty in starting and maintaining the heartbeat has also been reported with beta blockers.

DIABETES AND HYPOGLYCEMIA: Beta-adrenergic blockade may prevent the appearance of certain premonitory signs and symptoms (pulse rate and pressure changes) of acute hypoglycemia in labile insulin-dependent diabetes. In these patients, it may be more difficult to adjust the dosage of insulin.

THYROTOXICOSIS: Beta blockade may mask certain clinical signs of hyperthyroidism. Therefore, abrupt withdrawal of propranolol may be followed by an exacerbation of symptoms of hyperthyroidism, including thyroid storm. Propranolol does not distort thyroid function tests.

IN PATIENTS WITH WOLFF-PARKINSON-WHITE SYNDROME, several cases have been reported in which, after propranolol, the tachycardia was replaced by a severe bradycardia requiring a demand pacemaker. In one case this resulted after an initial dose of 5 mg propranolol.

PRECAUTIONS. *General:* Propranolol should be used with caution in patients with impaired hepatic or renal function. INDERAL is not indicated for the treatment of hypertensive emergencies.

Beta adrenoreceptor blockade can cause reduction of intraocular pressure. Patients should be told that INDERAL may interfere with the glaucoma screening test. Withdrawal may lead to a return of increased intraocular pressure.

Clinical Laboratory Tests: Elevated blood urea levels in patients with severe heart disease, elevated serum transaminase, alkaline phosphatase, lactate dehydrogenase.

DRUG INTERACTIONS: Patients receiving catecholamine-depleting drugs such as reserpine should be closely observed if INDERAL is administered. The added catecholamine-blocking action may produce an excessive reduction of resting sympathetic nervous activity which may result in hypotension, marked bradycardia, vertigo, syncopal attacks, or orthostatic hypotension.

Carcinogenesis, Mutagenesis, Impairment of Fertility: Long-term studies in animals have been conducted to evaluate toxic effects and carcinogenic potential. In 18-month studies in both rats and mice, employing doses up to 150 mg/kg/day, there was no evidence of significant drug-induced toxicity. There were no drug-related tumorigenic effects at any of the dosage levels. Reproductive studies in animals did not show any impairment of fertility that was attributable to the drug.

Pregnancy: Pregnancy Category C. INDERAL has been shown to be embryotoxic in animal studies at doses about 10 times greater than the maximum recommended human dose.

There are no adequate and well-controlled studies in pregnant women. INDERAL should be used during pregnancy only if the potential benefit justifies the potential risk to the fetus.

Nursing Mothers: INDERAL is excreted in human milk. Caution should be exercised when INDERAL is administered to a nursing woman.

Pediatric Use: Safety and effectiveness in children have not been established.

ADVERSE REACTIONS. Most adverse effects have been mild and transient and have rarely required the withdrawal of therapy.

Cardiovascular: bradycardia; congestive heart failure; intensification of AV block; hypotension; paresthesia of hands; thrombocytopenic purpura; arterial insufficiency, usually of the Raynaud type.

Central Nervous System: Lightheadedness; mental depression manifested by insomnia, lassitude, weakness, fatigue; reversible mental depression progressing to catatonia; visual disturbances; hallucinations; an acute reversible syndrome characterized by disorientation for time and place, short-term memory loss, emotional lability, slightly clouded sensorium, and decreased performance on neuropsychometrics.

Gastrointestinal: nausea, vomiting, epigastric distress, abdominal cramping, diarrhea, constipation, mesenteric arterial thrombosis, ischemic colitis.

Allergic: pharyngitis and agranulocytosis, erythematous rash, fever combined with aching and sore throat, laryngospasm and respiratory distress.

Respiratory: bronchospasm.

Hematologic: agranulocytosis, nonthrombocytopenic purpura, thrombocytopenic purpura.

Auto-Immune: In extremely rare instances, systemic lupus erythematosus has been reported.

Miscellaneous: alopecia, LE-like reactions, psoriasiform rashes, dry eyes, male impotence, and Peyronie's disease have been reported rarely. Oculomucocutaneous reactions involving the skin, serous membranes and conjunctivae reported for a beta blocker (practolol) have not been associated with propranolol.

REFERENCES.

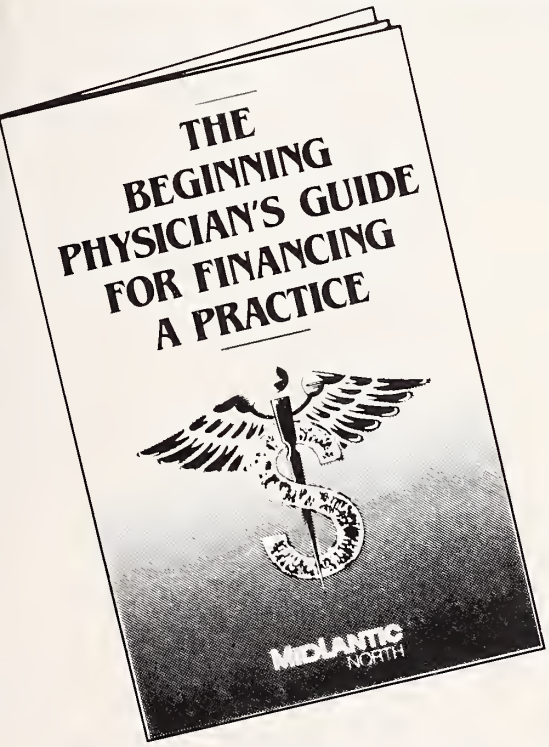
1. Epstein FH, Rosa RM: Adrenergic control of serum potassium. *N Engl J Med* 1983;309:1450-1451. **2.** Vincent HH, Boomsma F, Man in't Veld AJ, et al: Effects of selective and nonselective β-agonists on plasma potassium and norepinephrine. *J Cardiovasc Pharmacol* 1984;6:107-114. **3.** Struthers AD, Whitesmith R, Reid JL: Prior thiazide diuretic treatment increases adrenaline-induced hypokalaemia. *Lancet* 1983;1:1358-1361. **4.** Brown MJ, Brown DC, Murphy MB: Hypokalemia from beta$_2$-receptor stimulation by circulating epinephrine. *N Engl J Med* 1983;309:1414-1419. **5.** Struthers AD, Reid JL, Whitesmith R, et al: Effect of intravenous adrenaline on electrocardiogram, blood pressure, and serum potassium. *Br Heart J* 1983;49:90-93. **6.** Holland OB, Nixon JV, Kuhnert L: Diuretic-induced ventricular ectopic activity. *Am J Med* 1981;70:762-768.

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THE ACADEMY OF MEDICINE OF NEW JERSEY
THE MEDICAL SOCIETY OF NEW JERSEY
THE NEW JERSEY STATE DEPARTMENT OF HEALTH
Alcohol, Narcotic and Drug Abuse Unit
THE NEW JERSEY PSYCHIATRIC ASSOCIATION
and
THE NEW JERSEY DENTAL ASSOCIATION
present a symposium on

SUBSTANCE ABUSE IN THE PROFESSIONS

WEDNESDAY, MARCH 27, 1985
8:30 A.M.—4:00 P.M.

at

MSNJ HEADQUARTERS, Lawrenceville, N.J.

Individuals attending this symposium should gain an understanding of the problems related to substance abuse among professionals; become familiar with professional support and assistance groups (especially those which are active in New Jersey) and be provided with a resource manual for services available to specific types of impaired professionals and be better able to interface the alcoholism/drug abuse treatment system with professional self-help groups.

PROGRAM COMMITTEE: DANIEL P. GREENFIELD, M.D., M.P.H., Chairman
RICHARD M. LISS, M.D.
EDWIN A. TURNER, JR., M.D.

Four concurrent workshops will be presented from 2:30 P.M. to 4:00 P.M.

Participants will be able to take part in ONE of these sessions.

WORKSHOP A — DEALING WITH "PROFESSIONALS" IN TREATMENT GROUPS
William Annitto, M.D.

WORKSHOP B — PSYCHO-SOCIAL ISSUES IN "PROFESSIONAL FAMILIES"
Edward G. Reading, M.Div., C.A.C.

WORKSHOP C — PSYCHIATRIC DISORDERS AND SUBSTANCE ABUSE
Daniel P. Greenfield, M.D., M.P.H.

WORKSHOP D — CASE STUDIES

Please indicate your choice of workshop on registration form below and return to THE ACADEMY OF MEDICINE OF NEW JERSEY.

REGISTRATION APPLICATION: "SUBSTANCE ABUSE IN THE PROFESSIONS"
WEDNESDAY, MARCH 27, 1985
MSNJ Headquarters, Lawrenceville

REGISTRATION FEE: $30.00 (Includes Coffee Breaks, Lunch & Handouts)

Please make checks payable to: THE ACADEMY OF MEDICINE OF NEW JERSEY
and mail to: TWO PRINCESS ROAD, LAWRENCEVILLE, NJ 08648

I will be attending the following workshop:

A _____ B _____ C _____ D _____

I enclose $ _____ for _____ Reservation(s). Additional names listed separately.

NAME _____
(PLEASE PRINT)

ADDRESS _____

NO REFUNDS AFTER PROGRAM IS HELD

CME CALENDAR

The following is a list of continuing medical education courses for the next two months. Contact the sponsoring organization for further information.

This list is compiled through the cooperation of the Committee on Medical Education of the Medical Society of New Jersey, The Academy of Medicine of New Jersey, the New Jersey Chapter of the American Academy of Family Physicians, and the Office of Continuing Medical Education of the UMDNJ. For information on accreditation, please contact the sponsoring organization(s), indicated by italics—last line of each item.

ANESTHESIOLOGY

Mar.

26th Annual Postgraduate Anesthesiologists Seminar
23 8 A.M.-5 P.M.
24 8 A.M.-1 P.M.—The Hyatt, Cherry Hill
(NJ State Society of Anesthesiologists and AMNJ)

CARDIOLOGY

Mar.

20 **Joint Conference**
9 A.M.-3:45 P.M.—Coachman Inn, Cranford
(NJ Chapter, American College of Chest Physicians, NJ Thoracic Society, and AMNJ)

Apr.

24 **New Era in Diagnosis and Treatment of Coronary Heart Disease**
12 noon-4:30 P.M.—Sheraton Fairfield Hotel
(NJ Affiliate and Metropolitan Chapter, American Heart Association and AMNJ)

MEDICINE

Mar.

1 **Renal Conferences in Nephrology**
15 4-5 P.M.—UMDNJ-Rutgers Medical School, Med. Education Bldg., Rm. 393
(Nephrology Society of NJ and AMNJ)

Critical Care—New Techniques for the 1980s
2 9 A.M.-6 P.M.
3 9 A.M.-2 P.M.—Woodcliff Lake Hilton Inn, Woodcliff Lake
(NJ Chapter, American College of Physicians, Pascack Valley Hospital, and AMNJ)

6 **Hyperthyroidism**
1:30 P.M.—Essex County Hospital Center, Cedar Grove
(AMNJ)

6 **Statewide Tumor Board Conference and Dinner**
5:30 P.M.—MSNJ, Two Princess Rd., Lawrenceville
(Oncology Society of NJ and AMNJ)

6 **Endocrine Conferences**
13 3:30-5 P.M.—Rotates between Newark Beth Israel Medical Center, University Hospital, United Hospitals Medical Center, Newark, and VA Medical Center, Orange
(Endocrinology Section, AMNJ)

6 **Internal Medicine Review Course**
13 3-6 P.M.—Overlook Hospital,
20 Summit
27 *(AMNJ)*

6 **Medicine Morbidity and Mortality Conference**
8-9 A.M.—Rutgers Medical School, Medical Education Bldg., New Brunswick
(UMDNJ and AMNJ)

6 **Medical Grand Rounds**
13 12 noon-1 P.M.—Rutgers Medical
20 School, Medical Education Bldg.,
27 New Brunswick
(UMDNJ and AMNJ)

7 **Distinguished Lecture Series**
14 11 A.M.-12 noon—St. Joseph's Hospital and Medical Center, Paterson
(St. Joseph's Hospital and Medical Center and AMNJ)

7 **Immunoregulation: Basic**
14 **Concepts and Applications**
21 4-6 P.M.—Institute for Medical
28 Research, Copewood St., Camden
(Institute for Medical Research and AMNJ)

12 **New Forms of Therapy for Cutaneous Ulcers**
8-10 P.M.—Schering Corporation, Kenilworth
(NJ Dermatological Society and AMNJ)

13 **Annual Convention**
14 Harrah's Trump Plaza,
15 Atlantic City
16 *(NJ Academy of Family Physicians)*

19 **Workup and Treatment of the Primary Cancer Patient**
12 noon—St. Mary's Hospital, Orange
(AMNJ)

19 **Basal Cell Skin Cancer Conference of New Jersey**
10 A.M.—Office of Dr. T. Warshaw, 519 E. Broad St., Westfield
(Basal Cell Skin Cancer Conf. of NJ)

20 **Potassium Homeostasis**
1-2:30 P.M.—VA Medical Center, Lyons
(VA Medical Center and AMNJ)

20 **Dermatologic Conferences**
6-9 P.M.—Rutgers Community Health Plan, U.S. Hwy. 1 & Rt. 18, New Brunswick
(UMDNJ)

28 **Update on Superficial Fungal Infections**
11 A.M.—St. Joseph's Hospital and Medical Center, Paterson
(AMNJ)

Apr.

3 **Internal Medicine Review Course**
10 3-6 P.M.—Overlook Hospital,
17 Summit
24 *(Overlook Hospital and AMNJ)*

3 **Endocrine Conferences**
10 3:30-5 P.M.—Rotates between
17 Newark Beth Israel Medical Center,
24 University Hospital, and United Hospitals Medical Center, Newark, and VA Medical Center, E. Orange
(Endocrinology Section, AMNJ)

4 **Immunoregulation: Basic**
11 **Concepts and Applications**
18 4-6 P.M.—Institute for Medical
25 Research, Copewood St., Camden
(Institute for Medical Research and AMNJ)

5 **Renal Conferences in Nephrology**
19 4-5 P.M.—Medical Education Bldg., Rm. 393, Rutgers Medical School
(UMDNJ and AMNJ)

9 **Dermatological Conference**
8-10 P.M.—Schering Corporation, Kenilworth
(NJ Dermatological Society and AMNJ)

11 **Distinguished Lecture Series**
11 A.M.-12 noon—St. Joseph's Hospital and Medical Center, Paterson
(St. Joseph's Hospital and Medical Center and AMNJ)

12 **Antibiotic Therapy: 1985**
8 A.M.-12 noon—Overlook Hospital, Summit
(Overlook Hospital and AMNJ)

16 **What Have We Learned from 24-Hour Blood Pressure Monitoring?**
12 noon—St. Mary's Hospital, Orange
(AMNJ)

17 **Dermatological Conference**
6-9 P.M.—Rutgers Community Health Plan, 57 U.S. Hwy. 1, New Brunswick
(UMDNJ-Rutgers Medical School and AMNJ)

18 **New Strategies in Confronting the Cigarette Experience**
5-7:30 P.M.—Somerset Medical Center, Somerville
(Somerset Medical Center and AMNJ)

NINETEENTH ANNUAL MAIN LINE CONFERENCE

THURSDAY, APRIL 25 Thru SATURDAY, APRIL 27, 1985
BRYN MAWR, PENNSYLVANIA

TOPICS INCLUDE:

Acute Myocardial Infarct
Rehabilitation
Sexuality
Geriatrics
Dermatology
Antibiotics
Oncology
Rheumatology

GUEST SPEAKERS INCLUDE:

Robert A. Bruce, M.D.,
University of Washington

Theodore A. Stern, M.D.
Massachusetts General Hospital

William R. Stayton, Th.D.,
Jefferson Medical College

Jay S. Goodman, M.D.
University of Maryland

APPROVED:

AMA, PMS	24 hours—Category I
AAFP	20 hours—Prescribed
AOA, ACGPOMS	18½ hours—Category 2-D

TUITION: $190. (includes 3 luncheons, dinner and cocktails)

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CARDIOLOGY UPDATE. . .

IS DESIGNED FOR THE PHYSICIAN AND PROVIDES AN INTENSIVE SURVEY OF THE CURRENT STATUS OF CLINICAL CARDIOLOGY. . .

WEDNESDAY, MARCH 6, 1985

VALVULAR HEART DISEASE

MODERATOR: ABDULMASSIH S. ISKANDRIAN, M.D.

3:00 CASE PRESENTATION — *Gary S. Mintz, M.D.*

3:30 BEDSIDE DIAGNOSIS OF VALVULAR HEART DISEASE — *Ioannis P. Panidis, M.D.*

4:00 WHAT ARE THE INDICATIONS FOR CARDIAC CATHETERIZATION IN PATIENTS WITH VALVULAR HEART DISEASE? — *Charles E. Bemis, M.D.*

4:30 WHAT IS THE CORRECT TIME TO INTERVENE WITH SURGERY? — *Abdulmassih S. Iskandrian, M.D.*

5:00 WHAT ARE THE RESULTS OF PROSTHETIC VALVE REPLACEMENT? — *Stanley Spitzer, M.D.*

LECTURE HALL "A"—2nd floor New College Building, Hahnemann University
15th and Vine Streets, Philadelphia, PA

• NO REGISTRATION FEE • NO ADVANCE REGISTRATION REQUIRED •
• CME CATEGORY I CREDITS CERTIFIED •
WINE & CHEESE SERVED FOLLOWING CONFERENCE

NEUROLOGY/PSYCHIATRY

Mar.

4 **Another Affair in a Young Marriage**
8:15-10:30 P.M.—543 Park Street, Upper Montclair
(Essex Psychiatric Seminar and AMNJ)

7 **Case Seminars**

21 8-10 P.M.—310 Harding Drive, South Orange
(Advanced Psychiatric Study Group and AMNJ)

7 **Medication for Treating Borderline Syndrome**

14 **Recent Developments in Behavioral Medicine**

21 **New Directions for Cognitive Therapy**
12 noon-1 P.M.—Carrier Foundation, Belle Mead
(Carrier Foundation)

18 **Family Therapy with Adolescents**
1-4 P.M.—Fair Oaks Hospital, Summit
(Fair Oaks Hospital and AMNJ)

18 **Lecture Series**
8:30-10:30 P.M.—301 Broad Ave., Englewood
(NJ Psychoanalytic Society and AMNJ)

20 **Psychotropic Drugs and Interactions**
10:30 A.M.-12 noon—Greystone Park Psychiatric Hospital
(Greystone Park Psychiatric Hospital and AMNJ)

21 **Neuro-ophthalmology, Multiple Sclerosis, and Nutritional Deficiencies**
2 P.M.—John E. Runnells Hospital, Berkeley Heights
(AMNJ)

21 **Psychiatric Medical and Physical Aspects of Drug and Alcohol Abuse**
3 P.M.—Ancora Psychiatric Hospital, Hammonton
(AMNJ)

Apr.

2 **Role of Lithium in Child Psychiatry**
8:30-10:30 P.M.—Ramada Inn, Clark
(NJ Council of Child and Adolescent Psychiatry and AMNJ)

4 **Case Seminars**

18 8-10 P.M.—310 Harding Drive, South Orange
(Advanced Psychiatric Study Group and AMNJ)

4 **Clinical Impact of Doctor/Patient Relationship**

11 **Telling the Truth to Patients—Is This Good Medicine?**

18 **Cognitive Therapy in Adolescents**
12 noon-1 P.M.—Carrier Foundation, Belle Mead
(Carrier Foundation)

15 **Lecture Series**
8:30-10:30 P.M.—301 Broad Ave., Englewood
(NJ Psychoanalytic Society and AMNJ)

16- **Electroconvulsive Therapy:**

17 **Current Practice and Efficacy**
9 A.M.-5 P.M.—Carrier Foundation, Belle Mead
(Carrier Foundation)

18 **Coordination of Psychiatric Treatment in the Hospital and Community**
3 P.M.—Ancora Psychiatric Hospital, Hammonton
(AMNJ)

20 **Phobias and Panic Disorders**
9 A.M.-3:30 P.M.—Middlesex General University Hospital, New Brunswick
(New Jersey Psychoanalytic Society and AMNJ)

PEDIATRICS

Mar.

8 **Pediatric Emergency Care**
8 A.M.-12 noon—Overlook Hospital, Summit
(Overlook Hospital and AMNJ)

14 **Compensatory Digestive Mechanisms in the Newborn**
6:30-7:45 P.M.—NJ Medical School, Newark
(Statewide Perinatal Services and Research Center, UMDNJ, and AMNJ)

RADIOLOGY

Mar.

20 **Dinner Meeting**
6:30-9:30 P.M.—The Manor, West Orange
(Radiotherapy Section, AMNJ)

21 **NMR: A Bright Future**
5-7:30 P.M.—Somerset Medical Center
(Somerset Medical Center and AMNJ)

21 **Radiology Meeting**
7:30 P.M.—Saint Barnabas Medical Center, Livingston
(Radiological Society of NJ and AMNJ)

23 **Obstetrical and Perinatal Ultrasound**
8:30 A.M.-4:30 P.M.—The Sheraton Inn, Newark Airport
(NJ Institute of Ultrasound in Medicine, Radiological Society of NJ, and AMNJ)

26 **High Field NMR Imaging**
8-10 P.M.—Englewood Club, Englewood
(Englewood Surgical Society and AMNJ)

28 **Visiting Professorship Program**
1:30-5 P.M.—Saint Barnabas Medical Center, Livingston
(Saint Barnabas Medical Center and AMNJ)

Apr.

16 **Topic To Be Announced**
7:30-10 P.M.—Saint Barnabas Medical Center, Livingston
(NJ Institute of Ultrasound in Medicine and AMNJ)

Daily Schedule
219th Annual Meeting

May 2-5, 1985
Americana Host Farm Resort
Lancaster, Pennsylvania

Thursday, May 2, 1985
9:00 A.M.—Registration Opens
9:00 A.M.—Message Center Opens
2:00 P.M.—House of Delegates
4:00 P.M.—Reference Committees (Three Reference Committee Meetings)

Friday, May 3, 1985
7:30 A.M.—Registration Opens
9:00 A.M.—House of Delegates (election)
9:00 A.M.—Message Center and Exhibits Open
12:00 NOON—Golden Merit Award Ceremony Followed by Reception
2:30 P.M.—Reference Committees (Three Reference Committee Meetings)
5:00 P.M.—JEMPAC Political Forum
5:45 P.M.—JEMPAC Wine and Cheese Reception

Saturday, May 4, 1985
8:00 A.M.—Registration Opens
8:30 A.M.—House of Delegates
9:00 A.M.—Message Center and Exhibits Open
1:30 P.M.—House of Delegates
6:30 P.M.—Inaugural Reception followed by Inaugural Dinner

Sunday, May 5, 1985
8:00 A.M.—Registration Opens
9:00 A.M.—Message Center and Exhibits Open
9:00 A.M.—Program of Major Interest to Physicians
12 NOON—Luncheons and Board of Trustees' Meeting

SPECIAL MEETING ANNOUNCEMENT

ALCOHOL AND DRUG ADDICTION IN DOCTORS DIAGNOSIS AND TREATMENT

APRIL 11, 1985 till noon on APRIL 15, 1985

Place: GOVERNOR MORRIS INN, Morristown, NJ 07960

April 11, 1985 will include a special program providing 6 CMS credit hours which is entitled: RECENT ADVANCES IN ALCOHOLISM & THE NEW JERSEY IMPAIRED PHYSICIANS PROGRAM.

April 12-15 will be an AA Recovery Program Attendance Limited to Physicians who have or may have a problem with Alcohol and/or Drugs. PERSONAL ANONYMITY WILL BE PRESERVED.

Sponsored by the N.J. Professional group in A.A.

For further information, write to:
Secretary, 86 Miller Road, Morristown, N.J. 07960

1985 CME CRUISE/CONFERENCES ON SELECTED MEDICAL TOPICS

Caribbean, Mexican, Hawaiian, Alaskan, Mediterranean. 7-14 days year-round. Approved for 20-24 CME Cat. 1 credits (AMA/PRA) & AAFP prescribed credit. Distinguished professors. FLY ROUNDTRIP FREE ON CARIBBEAN, MEXICAN, & ALASKAN CRUISES. Execellent group fares on finest ships. Registration limited. Pre-scheduled in compliance with present IRS requirements.

Information: International Conferences, 189 Lodge Ave., Huntington Station, N.Y. 11746. (516) 549-0869.

SYMPOSIUM ON CURRENT TECHNIQUES IN EYELID AND LACRIMAL SURGERY, April 27, 1985.

The University of Medicine and Dentistry of New Jersey—New Jersey Medical School, Christine Zolli, M.D., Program Director, Registration information can be obtained from the UMDNJ-Continuing Education, 100 Bergen Street, Newark, NJ (201) 456-4267.

THE NEW JERSEY INSTITUTE OF ULTRASOUND IN MEDICINE

in cooperation with

THE ACADEMY OF MEDICINE OF NEW JERSEY

present a symposium on

OBSTETRICAL AND PERINATAL ULTRASONOGRAPHY

SATURDAY, MARCH 23, 1985
8:30 A.M.-4:00 P.M.
at
SHERATON INN, NEWARK AIRPORT

The registrant will be exposed to a thorough review of the state of the art in obstetrical and newborn ultrasonography. The speakers are internationally known authorities in the field.

PROGRAM CHAIRMAN: CHARLES WHELAN, M.D., Director of Radiology, Mountainside Hospital, Montclair, NJ., Assistant Clinical, Professor Radiology, New York University School of Medicine.

For further information please contact:
EXECUTIVE OFFICES
THE ACADEMY OF MEDICINE IN NEW JERSEY
Two Princess Road, Lawrenceville, NJ 08648
(609) 896-1717

NEW YORK FERTILITY RESEARCH FOUNDATION, INC.

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Phone: (212) 744-5500

18 **Oncology: Current Radiation and Therapy**
11 A.M.—St. Joseph's Hospital and Medical Center, Paterson
(St. Joseph's Hospital and Medical Center and AMNJ)

18 **Radiology Meeting**
7:30 P.M.—Saint Barnabas Medical Center, Livingston
(Radiological Society of NJ and Radiology Section and AMNJ)

20 **Basic M-Mode Echocardiography**
21 **for Physicians and Technologists**
9 A.M.-5 P.M.—The Center for Health Affairs, Princeton
(The National Foundation for Non-invasive Diagnostics and AMNJ)

25 **Visiting Professorship Program**
1:30-5 P.M.—Saint Barnabas Medical Center, Livingston
(Saint Barnabas Medical Center and AMNJ)

SURGERY

Mar.

6 **Surgical Treatment of Morbid Obesity**
1 P.M.—Christ Hospital, Jersey City
(AMNJ)

12 **Surgical Grand Rounds**
19 7-9 A.M.—Hackensack Medical Center
(Hackensack Medical Center and AMNJ)

13 **Dinner Meeting**
6:30 P.M.—The Manor, West Orange
(NJ Society of Colon and Rectal Surgeons and AMNJ)

Apr.

2 **Surgical Grand Rounds**
16 7-9 A.M.—Hackensack Medical
30 Center
(Hackensack Medical Center and AMNJ)

23 **Use of Laser in the G.I. Tract**
8-10 P.M.—Englewood Club, Englewood
(Englewood Surgical Society and AMNJ)

SURGICAL SPECIALTIES

Mar.

1 **Vascular Surgical Rounds**
8 4-5 P.M.—Medical Education Bldg.,
15 Rm. 593, New Brunswick
22 *(UMDNJ)*
29

Apr.

4 **Vascular Surgical Rounds**
11 4-5 P.M.—Medical Education Bldg.,
18 Rm. 593, Rutgers Medical School
25 *(UMDNJ)*

12 **10th Annual NJ Orthopaedic**
13 **Symposium**
UMDNJ-Rutgers Medical School
(NJ Orthopaedic Society and AMNJ)

18 **Orthopedic Problems: Nonoperative Management of Chronic Back Pain**
2 P.M.—John E. Runnells Hospital, Berkeley Heights
(AMNJ)

MISCELLANEOUS

Apr.

14 **Regional Scientific CME Meeting**
UMDNJ-New Jersey Medical School, Newark
(American College of Physicians, NJ Associates)

The *Journal* of the Medical Society of New Jersey
announces the reprinting of the

WILLIAM CARLOS WILLIAMS COMMEMORATIVE ISSUE

September, 1983

Honoring the 100th anniversary of the birth of New Jersey's prize-winning poet and physician. Included in this handsomely illustrated, full-color issue will be original articles by persons close to William Carlos Williams, artwork from his social and intellectual circle, and samples of his finest writings.

Copies of this special issue are available by sending $5.00 for each (check or money order) to MSNJ, Two Princess Road, Lawrenceville, NJ 08648.

Please send a copy of the **William Carlos Williams Commemorative Issue** to:

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7,000 innovative New Jersey doctors insuring *ourselves* for our own sake.

That's over two-thirds of the practicing physicians and surgeons in the state—practical, forward-minded businessmen and women who've said they're *not going to take it anymore!*

Professional liability insurance is not something any of us can just decide to do without. We have to have it in this business. But in today's crazy legal environment, the risk we assume has grown so far out of proportion that many commercial underwriters have been unable to cope. Too many New Jersey doctors know all too well how it feels to be abandoned—without warning—as their insurance companies have folded their tents and slipped quietly away in the night.

Eight years ago, when the malpractice insurance industry fell completely apart in this state, a group of creative thinkers—doctors and insurance pro's—got together to solve the problem.

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The solution was and is the Medical Inter-Insurance Exchange of N.J., a wholly doctor-owned cooperative service organization through which we insure *ourselves* for our own sake. We're in it for security—not for profit—and we've put together the absolute best protection package available for the money.

We have no salespeople. To find out more about membership, please call TOLL FREE (in N.J.) **1-800-257-6288** to speak directly to our Vice President & Director of Policyholder Services, Bill Reilly. You'll enjoy straight talk from someone with your interests at heart.



A professional service message from the
Medical Inter-Insurance Exchange of New Jersey
Two Princess Road, Lawrenceville NJ 08648
(609) 896-2404.

Christensen's Introduction to the Physics of Diagnostic Radiology; Diseases of the Nails; The Thyroid and Its Disease

Christensen's Introduction to the Physics of Diagnostic Radiology, Third Edition

Thomas S. Curry, III, James E. Dowdey, Robert C. Murry, Jr. Philadelphia, PA, Lea & Febiger, 1984. Pp. 515. Illustrated. ($30)

This volume is the latest edition of a book that enjoys a reputation of being one of the best introductory texts on the physics of radiology. The authors have maintained the purpose of the late Dr. Christensen, to minimize formulas and to maximize explanations of underlying concepts.

The additions of this book follow the progress of new technologies in the field of radiology. The chapter on NMR principles is one of the clearest and most complete reviews available. The sections "Digital Radiography" and "Doppler Ultrasonography" also are of very high quality.

Christensen's will admirably serve a resident, a radiologist, or a physician with interest in the field. It is highly recommended.

Neil B. Horner, M.D.

Diseases of the Nails and Their Management

Baran and Dawber (eds). Boston, MA, Blackwell Scientific Publications, 1984. Pp. 469. Illustrated.

In the rather strange preface to this book proclaiming cross-channel amity, the French and English editor-dermatologists state their purpose: to provide an international reference book dealing with the subject of nails. Then, they absolve the minor contributors and state their willingness to shoulder the blame for the faults of the product. More work and less mea culpa would have been appreciated. Reference books do not have to be dull, repetitive presentations of heaps of undigested information.

Much of this volume, unhappily, is just that sort of thing. For instance, a nice picture and description of elkonyxis is followed by "has been described in secondary syphilis, Reiter's syndrome, and due to trauma." No references are given, and the reader has not learned much. It also is a good example of the horizontal lists which are meant to pass for text, a sad substitute for instructional writing. These horizontal lists are emphasized by the plethora of full and multiple page vertical lists which constantly intrude, and neither entertain nor enlighten.

The sections on the nail's structure and function are dense and confusing, and a curious chapter, "The Nail in Childhood and Old Age," appears to be a filler which could be deleted. It is not rewarding to learn, in another place, that the "oil patch" abnormality familiarly present in psoriatic nails has "been reported in systemic lupus erythematosus and may be extensive in lectitis purulenta et granulomata." The latter condition is crying for eponymic fame, except that there is but a single case report to date. However, it is described in the text though not on the page noted in the index. There are numerous and obvious misspelled words and names, and a relentless inclusion of printer's space savers, (p.000), for references that never made it to print.

All this is too bad because the book is rich in excellent photographs which attest to the author's capabilities. This is particularly evident in the chapters containing clinical information on nail changes associated with internal disease, other skin conditions, and local tumors. The material covering surgery offers clear diagrams and know-how details. The only American contributor deals with the mysteries of manicuring, nail wrapping, and nail sculpturing.

Within this inflated volume is a leaner, carefully edited, useful, and reasonably priced handbook (pardon the pun) waiting to be published. I'd wait!

Christopher M. Papa, M.D.

The Thyroid and Its Disease, 5th Edition

DeGroot, Larsen, Refetoff, and Stanbury. New York, NY, John Wiley & Sons, 1984. Pp. 907. Illustrated. ($65)

Originally published in 1937, this book is now in its fifth edition. It is an up-to-date textbook devoted to the anatomy and physiology of the thyroid gland in health and disease. Included in this textbook is the developmental structure of the thyroid gland, metabolic regulation, hormonology, relationship to other glands, dysfunction in disease, testing mechanisms and interpretation, hereditary factors, the thyroid in nonthyroidal illness, and thyroid surgery.

The text attempts to bring to the reader all the significant advances in thyroid research over the years, and especially since the 1975 edition; the text manages to accomplish this without the production of two volumes of similar size. Each chapter is followed by numerous references (one chapter with over 500 quoted) for further reading as desired. Some case material is presented, not all inclusive, but illustrative. Some abbreviations used are not included in the list at the front of the text, so the reader must hunt back in the chapter for explanation. The tables are helpful; the figures mostly easy to read. The vast increasing knowledge relating to thyroid function in health and disease, diagnosis, and therapy is brought together in this text to the reader's benefit.

This textbook must be considered a valuable library addition for the thyroid student, researcher, and clinician.

Mark M. Singer, M.D.

Drs. Jurkans; Kaplan; Parr; Roe; Solk; Vandersluis; Wiesenfeld

Dr. Anton Jurkans

A member of our Morris County component, Anton Jurkans, M.D., died on September 22, 1984, at Dover General Hospital. Born in Latvia in 1905, Dr. Jurkans received his medical degree from the University of Latvia in 1931. Emigrating to the United States, he served residencies in Plattsburgh, New York, and Louisville, Kentucky. From 1953 until his retirement, Dr. Jurkans, a psychiatrist, was affiliated with Greystone Park Psychiatric Hospital. In 1981 he received MSNJ's Golden Merit Award in recognition of his 50 years of medical practice.

Dr. Joseph E. Kaplan

Joseph Elliott Kaplan, M.D., an internist and ophthalmologist in Ventnor City, died in Atlantic City Medical Center on August 7, 1984, at the venerable age of 87. Born in Russia, Dr. Kaplan emigrated to the United States and received his medical degree from St. Louis University School of Medicine, Missouri, in 1924. He was affiliated with Wills Eye Hospital, the Hospital of the University of Pennsylvania, Philadelphia General Hospital, and Albert Einstein Medical Center, Philadelphia, in his early career when he was a member of the Philadelphia (Pennsylvania) County Medical Society, and continued his affiliation even after joining our Atlantic County component, in 1976.

Dr. Leonard L. Parr

On September 24, 1984, Leonard Lloyd Parr, M.D., died at his home in Summit, of a myocardial infarction. Only 52 years of age, Dr. Parr, a member of our Essex County component, was an internist and psychiatrist with offices in Newark. A native of New York, Dr. Parr received his medical degree from Chicago Medical School in 1956, and became affiliated with Saint Michael's Medical Center, Newark. He was a member of the American Medical Association.

Dr. William J. Roe

A prominent Englewood surgeon, William Joseph Roe, M.D., died on October 31, 1984, at the age of 63. A native of Paterson, Dr. Roe received his medical degree from Georgetown University School of Medicine in 1945. Originally he established a practice in general and thoracic surgery in Teaneck, later moving his office to Englewood. A member of our Bergen County component, as well as being a member of the American Medical Association, Dr. Roe held membership in a number of prestigious professional organizations. He was a Fellow of the American and International Colleges of Surgeons; a Fellow of the American Academy of Cerebral Palsy; as well as being board certified in both general and thoracic surgery. Dr. Roe had been affiliated with Paterson General Hospital; Holy Name Hospital, Teaneck; Bergen Pines County Hospital, Paramus; Chilton Memorial Hospital, Pompton Plains; and United Hospitals Medical Center, Newark. He served as assistant clinical professor of surgery at the New Jersey Medical School, Newark. He had been president of the Bergen County Medical Society and also of the Bergen County Heart Association.

Dr. Arthur G. Solk

At the remarkable age of 88, Arthur George Solk, M.D., died at Saint Michael's Medical Center, Newark, on September 16, 1984. Born in Russia, and emigrating to the United States, Dr. Solk earned his medical degree at Bellevue Hospital Medical College, New York, in 1920. Dr. Solk was an orthopedic surgeon in Newark, affiliated with St. James, Saint Michael's, and Presbyterian Hospitals, in that city. He was a Fellow of the American College of Surgeons and a member of the American Medical Association and of our Essex County component.

Dr. Harold H. Vandersluis

Harold Henry Vandersluis, M.D., a retired member of Bergen County component, died on October 12, 1984, at Osprey, Florida, at the age of 83. Born in Fergus Falls, Minnesota, Dr. Vandersluis received his medical education at the University of Minnesota Medical School and graduated in 1927. He was a general practitioner with emphasis on ear, nose, and throat problems who served the Park Ridge community where he resided for over 43 years. He was affiliated with Hackensack Hospital, had been a member of the Park Ridge Board of Health for 10 years, serving as president in 1941. He had been school physician in the communities of Montvale, Woodcliff Lake, and Park Ridge, and organized and served as medical advisor to the Tri-Boro Ambulance Corps for 34 years. He was a medical examiner for the Selective Service System during World War II. Dr. Vandersluis was also an accomplished pilot, named to the Aviation Hall of Fame in Teterboro. He was a member of the American Medical Association, and in 1977 Dr. Vandersluis received MSNJ's Golden Merit Award honoring his 50 years as a physician.

Dr. Benjamin Wiesenfeld

A Perth Amboy orthopedic surgeon, Benjamin Wiesenfled, M.D., died on October 13, 1984, at the age of 74. A member of our Middlesex County component, Dr. Wiesenfeld received his medical degree from the Faculty of Medicine at the University of Edinburgh, Scotland, in 1936. Returning to the United States, he established his practice in Woodbridge, later moving to Perth Amboy. He had affiliations with the Hospital Center at Orange, J.F. Kennedy Hospital, Edison, and Perth Amboy General Hospital. He was a Fellow of the American Academy of Orthopedic Surgeons and a Diplomate of the American Board of Orthopedic Surgery.

Style Sheet

The Journal *is the official organ of the Medical Society of New Jersey. The goals of* The Journal *are educational and informational. All material published in* The Journal *is copyrighted by MSNJ.*

CONTENT

The educational content of each issue appears as scientific articles, based on research, original concepts relative to epidemiology of disease, and treatment methodology; case reports based on unusual clinical experiences; review articles; clinical notes, succinct items on some aspect or new observation or technique of a case experience; and special articles, which include evaluations, policy and position papers, and reviews of nonscientific subjects. Other topics include commentary (critical narration); medical history; therapeutic drug information; pediatric briefs; nutrition update; and an opinion column. Editorials are prepared by the Editor and by guest contributors on timely and relevant subjects; editorials are the responsibility of the author. The Doctors' Notebook section contains organizational, informational, and administrative items from MSNJ and from the community. Letters to the Editor and book reviews are welcome and will be published as space permits. The principal aim in the preparation of a contribution should be relevance to diagnosis and treatment and to education of patients and professionals. Preference will be given to professional authors from New Jersey and to out-of-state lecturers who submit a suitable manuscript based on a presentation made in New Jersey.

ASSIGNMENT OF COPYRIGHT

In compliance with the Copyright Revision Act of 1976 (effective January 1, 1978), a transmittal letter or a separate statment accompanying material offered to *The Journal* of the Medical Society of New Jersey must contain the following language and must be signed by all authors:

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SPECIFICATIONS

Submit two **manuscripts** that must be typewritten and double-spaced on 8½" by 11" paper. Statistical methods used in articles should be identified. Acknowledgements will be made only for specific preparation of an essential part of the manuscript.

Authors are asked to seek clarity, accuracy, and originality; attention to details of grammar, spelling, and typing are important.

The **title page** should include the full name, degrees, and affiliations of all authors, and the name and address of the author to whom reprint requests should be sent.

The author should submit a 40-word **abstract** to be used at the beginning of the article.

Tables must be typewritten and double-spaced on separate 8½" by 11" sheets, with a title and number. Symbols for units should be confined to column headings, and abbreviations, properly explained, should be kept to a minimum.

Illustrations should be professional quality, black-and-white glossy prints. The name of the author, figure number, and the top of the figure should be noted on a label attached to the back of each illustration. Where photographs of patients are used, the subjects should not be identifiable or publication permission, signed by the subject or responsible person, must be included with the photograph. Material taken from other publications must give credit to the source; written permission for republication from the original publisher must be submitted. The cost of color photographs must be borne by the author.

Generic names should be used with proprietary names indicated parenthetically or as a footnote with the first use of the generic name. Proprietary names of devices should be indicated by the registration symbol—®.

The **summary** of the article should not exceed 250 words; it should contain only essential facts.

References should not exceed 35 citations except in review articles, and should be cited consecutively in the text by numbers in parentheses at the end of the sentence. The reference list should be typewritten and double-spaced on separate 8½" by 11" sheets in the numerical order in which they are first cited in the text. The style of reference is that of *Index Medicus*:

1. Goldwyn RM: Subcutaneous mastectomy. *J Med Soc NJ* 74:1050-1052, 1977.

2. Dixon WJ, Massey FJ: *Introduction to Statistical Analysis.* New York, NY, McGraw-Hill, 1969, pp. 42-48.

PUBLICATION POLICY

Receipt of each manuscript will be acknowledged and a copy delivered to the Editor who refers the paper to one or more members of the Editorial Board. The final decision is reserved for the Editor. No direct contact between the reviewers and the authors will be permitted, but authors will be informed of the reviewers' comments. The publication lag for original articles may be six months or more. Galley proofs will be submitted to the author for correction of typographical errors.

REPRINT ORDERS

Reprints may be ordered after the author is notified that the article has been selected for a specific issue of JMSNJ. A check for the cost of reprints including remake charge if order is received after due date must accompany the order.

COMMUNICATIONS

All communications should be sent to the Editor, *The Journal*, MSNJ, 2 Princess Road, Lawrenceville, NJ 08648.

Americana
Host Farm Resort

HOUSING
APPLICATIO

219TH ANNUAL MEETING
MEDICAL SOCIETY OF NEW JERSEY
THURSDAY, MAY 2, TO SUNDAY, MAY 5, 1985

THE FOLLOWING ARE ALL-INCLUSIVE PACKAGE PLANS BASED ON MODIFIED AMERICAN PLAN, INCLUDING DINNER AND BREAKFAST DAILY STARTING WITH DINNER ON THE DAY OF ARRIVAL, THE SATURDAY NIGHT BANQUET, LIVE CABARET SHOWS EACH EVENING FEATURING A DIFFERENT SHOW EVERY NIGHT, STATE SALES TAX, AND ALL GRATUITIES COVERING BELLMEN FOR IN/OUT LUGGAGE SERVICE, CHAMBERMAIDS, AND ALL MEAL SERVICE AS OUTLINED:

FOUR-NIGHT PACKAGE
$435.00 PER PERSON, SINGLE OCCUPANCY
$324.00 PER PERSON, DOUBLE OCCUPANCY
$120.00 PER CHILD SHARING A ROOM WITH PARENTS

THREE-NIGHT PACKAGE
$337.00 PER PERSON, SINGLE OCCUPANCY
$251.00 PER PERSON, DOUBLE OCCUPANCY
$ 90.00 PER CHILD SHARING A ROOM WITH PARENTS

TWO-NIGHT PACKAGE
$238.00 PER PERSON, SINGLE OCCUPANCY
$177.00 PER PERSON, DOUBLE OCCUPANCY
$ 60.00 PER CHILD SHARING A ROOM WITH PARENTS

- **Forms received after April 1, 198 will be confirmed on an "if ava able" basis.**
- **Fill out only one form for each roo required.**
- **DEPOSIT OF $100 PER ROO MUST ACCOMPANY FORM T CONFIRM RESERVATIONS.**
- **Please make check payable HOST FARM. Major credit cards a cepted at hotel, but not for depos**
- **Hotel confirmation is required f check-in.**
- **Send form and deposit to:**
  Host Reservations
  2300 Lincoln Highway East
  Lancaster, PA 17602
  717-299-5500

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☐ **WILL BE SHARING ROOM****

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ROOMMATES: _____ CHILDREN'S AGES: _____

_____

_____

ADDRESS: _____

CITY: _____

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CHECK IF OFFICIAL DELEGATE ☐ COUNTY: _____

ARRIVAL DATE _____ DAY _____

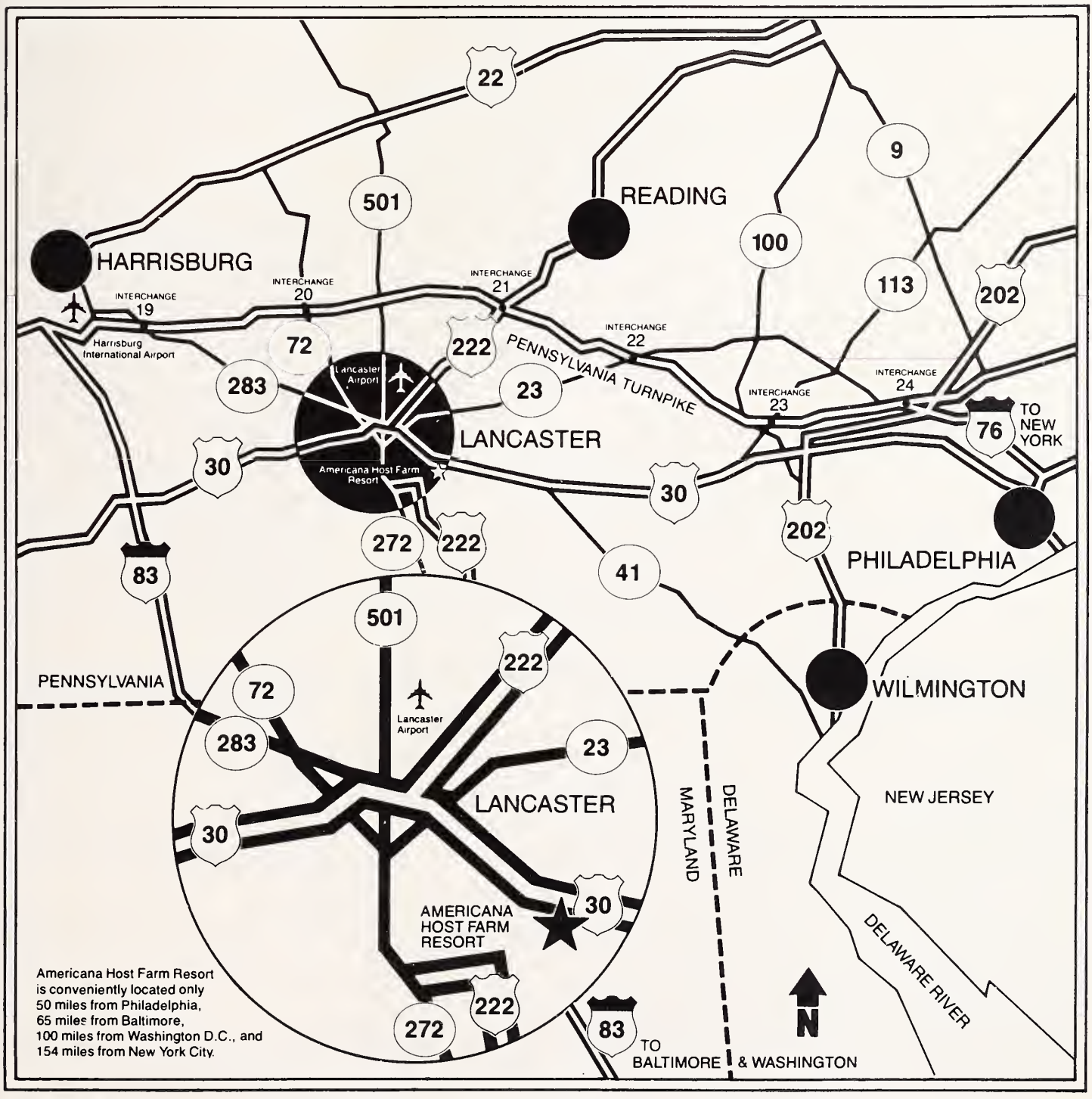
DEPARTURE DATE _____ DAY _____

CHECK-IN: AFTER 4 PM
CHECK-OUT: BY 12 NOON

MEDICAL SOCIETY OF NEW JERSEY—219TH ANNUAL MEETING #2

Americana
Host Farm Resort

2300 Lincoln Highway East (Route 30), Lancaster, Pennsylvania 17602 (717) 299-5500



FROM NEW YORK
Take New Jersey Turnpike South to Pa. Turnpike. Take Pa Turnpike West to Interchange No. 21. Travel South on U.S. Rte. 222 to U.S. Route 30. Travel East on U.S. Route 30, approximately 5 miles to Americana Host Farm Resort.

FROM PITTSBURGH & POINTS WEST
Travel East on Pa. Turnpike to Int. 19. Go South on I-283 for 30 miles into Route 30 East for 6 miles to Americana Host Farm Resort.

FROM PHILADELPHIA
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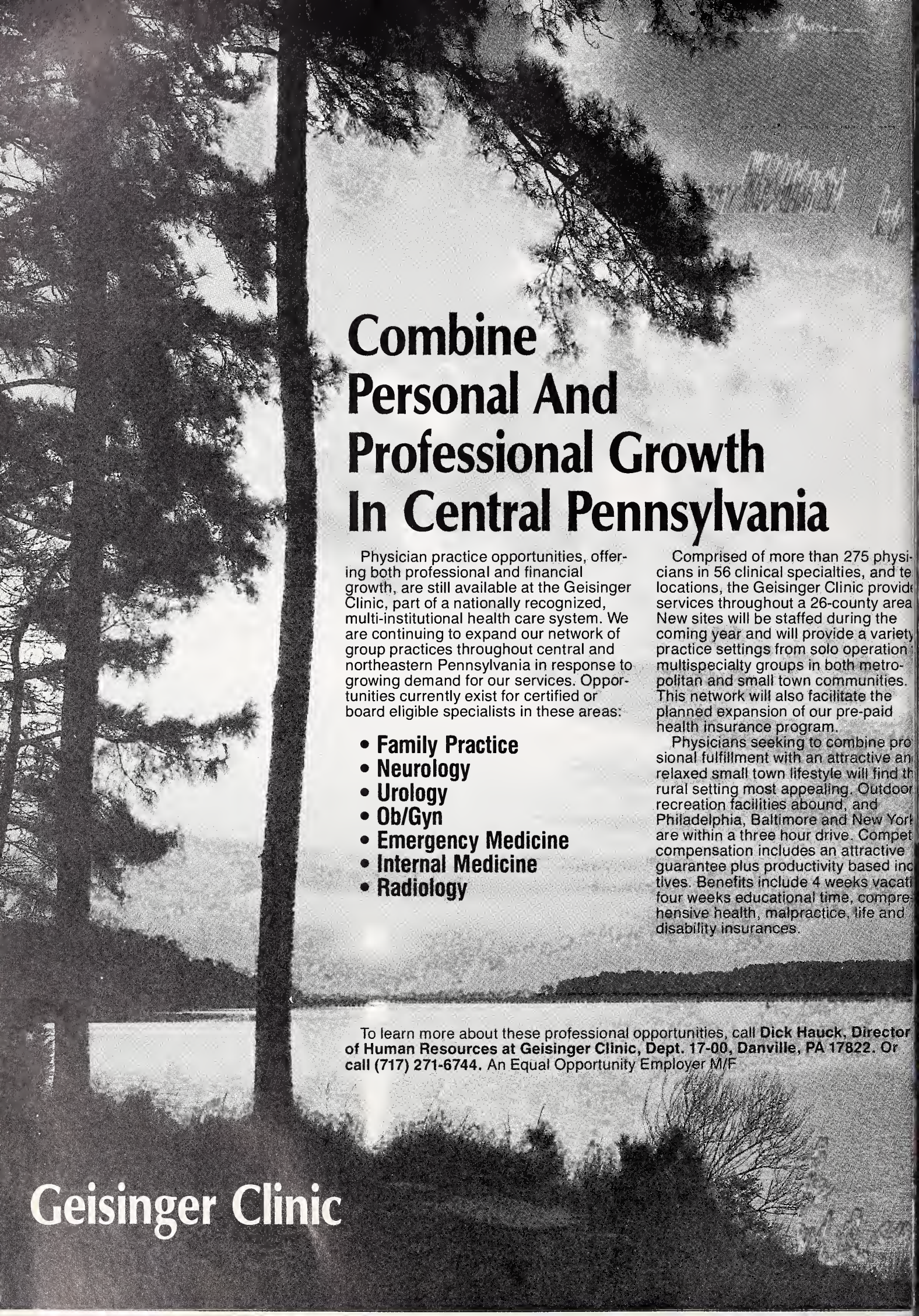
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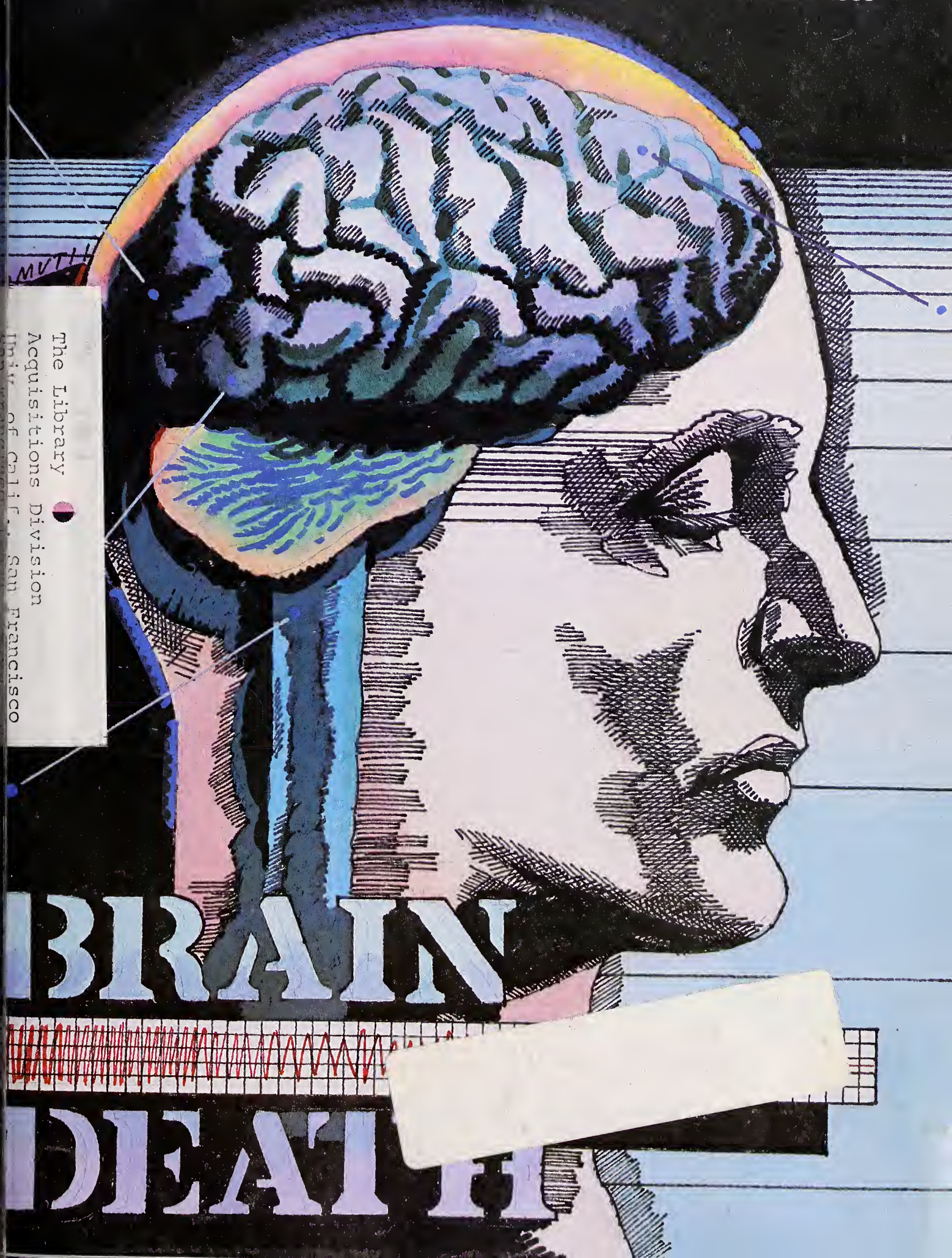
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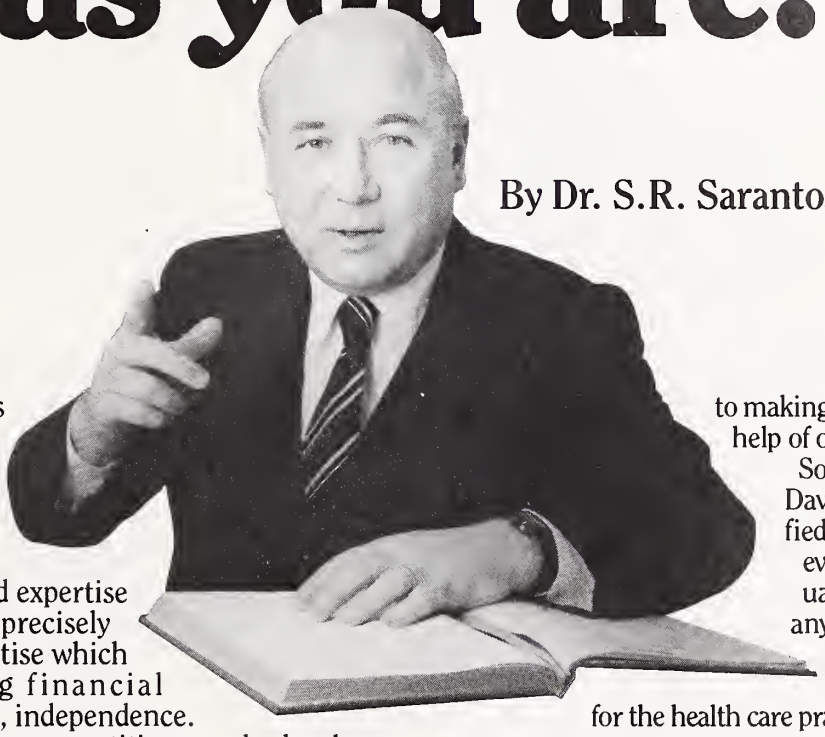
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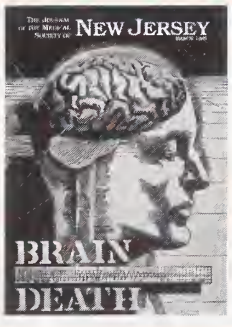
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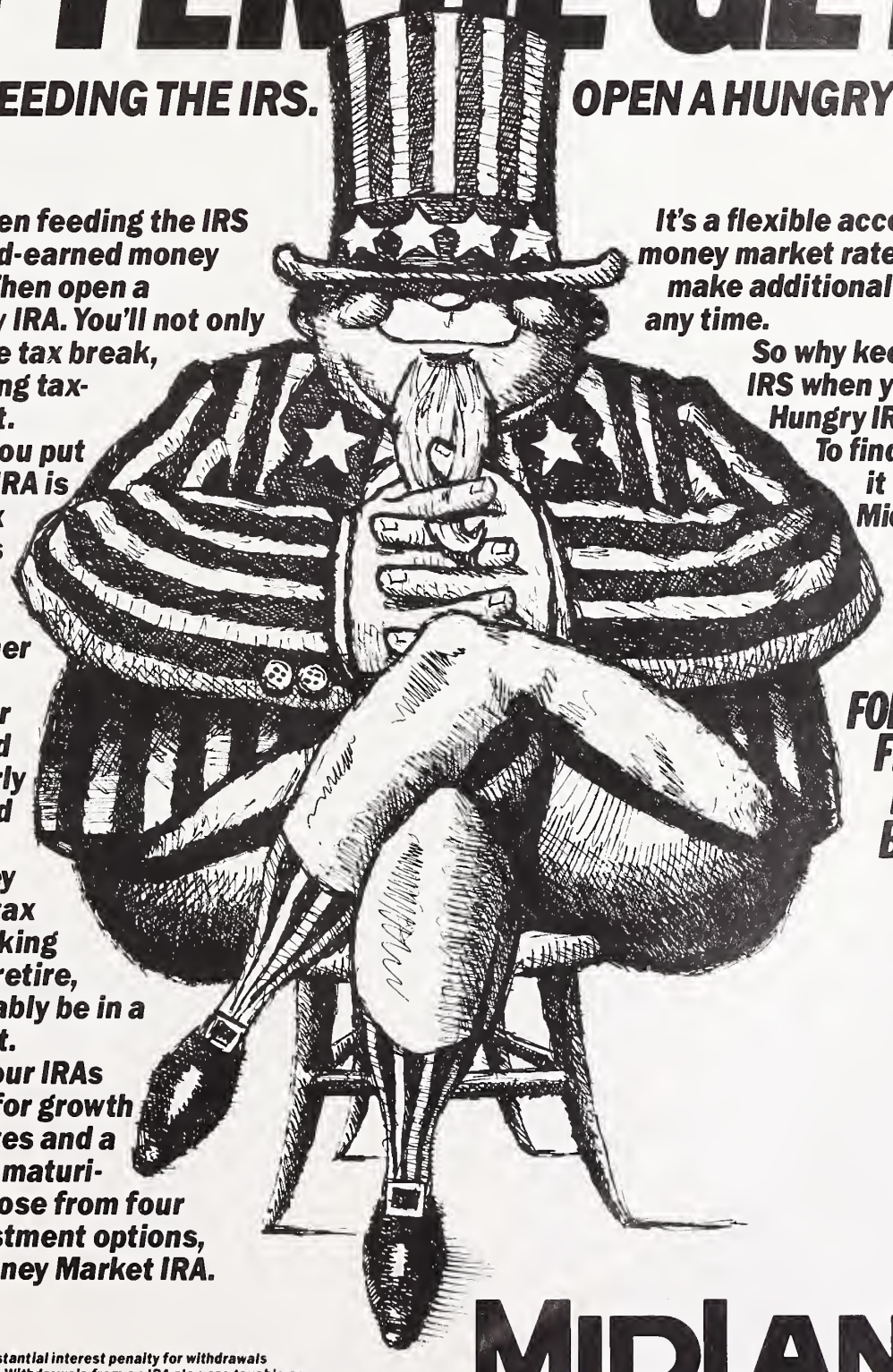
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On The Cover: Policy at Middlesex General-University Hospital provides specific criteria for determining death. Read the story beginning on page 199. Cover illustration by William Harmuth.



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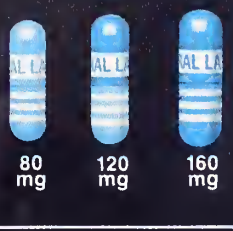
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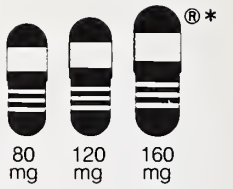
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JUST ONCE EACH DAY FOR SIMPLIFIED CORE THERAPY IN ANGINA

ONCE-DAILY

INDERAL® LA

(PROPRANOLOL HCl) LONG ACTING CAPSULES



BRIEF SUMMARY *(FOR FULL PRESCRIBING INFORMATION, SEE PACKAGE CIRCULAR.)*

INDERAL® LA brand of propranolol hydrochloride **(Long Acting Capsules)**

DESCRIPTION. Inderal LA is formulated to provide a sustained release of propranolol hydrochloride. Inderal LA is available as 80 mg, 120 mg, and 160 mg capsules.

CLINICAL PHARMACOLOGY. INDERAL is a nonselective beta-adrenergic receptor blocking agent possessing no other autonomic nervous system activity. It specifically competes with beta-adrenergic receptor stimulating agents for available receptor sites. When access to beta-receptor sites is blocked by INDERAL, the chronotropic, inotropic, and vasodilator responses to beta-adrenergic stimulation are decreased proportionately.

INDERAL LA Capsules (80, 120, and 160 mg) release propranolol HCl at a controlled and predictable rate. Peak blood levels following dosing with INDERAL LA occur at about 6 hours and the apparent plasma half-life is about 10 hours. When measured at steady state over a 24-hour period the areas under the propranolol plasma concentration-time curve (AUCs) for the capsules are approximately 60% to 65% of the AUCs for a comparable divided daily dose of INDERAL tablets. The lower AUCs for the capsules are due to greater hepatic metabolism of propranolol, resulting from the slower rate of absorption of propranolol. Over a twenty-four (24) hour period, blood levels are fairly constant for about twelve (12) hours then decline exponentially.

INDERAL LA should not be considered a simple mg for mg substitute for conventional propranolol and the blood levels achieved do not match (are lower than) those of two to four times daily dosing with the same dose. When changing to INDERAL LA from conventional propranolol, a possible need for retitration upwards should be considered especially to maintain effectiveness at the end of the dosing interval. In most clinical settings, however, such as hypertension or angina where there is little correlation between plasma levels and clinical effect, INDERAL LA has been therapeutically equivalent to the same mg dose of conventional INDERAL as assessed by 24-hour effects on blood pressure and on 24-hour exercise responses of heart rate, systolic pressure and rate pressure product. INDERAL LA can provide effective beta blockade for a 24-hour period.

The mechanism of the antihypertensive effect of INDERAL has not been established. Among the factors that may be involved in contributing to the antihypertensive action are (1) decreased cardiac output, (2) inhibition of renin release by the kidneys, and (3) diminution of tonic sympathetic nerve outflow from vasomotor centers in the brain. Although total peripheral resistance may increase initially, it readjusts to or below the pretreatment level with chronic use. Effects on plasma volume appear to be minor and somewhat variable. INDERAL has been shown to cause a small increase in serum potassium concentration when used in the treatment of hypertensive patients.

In angina pectoris, propranolol generally reduces the oxygen requirement of the heart at any given level of effort by blocking the catecholamine-induced increases in the heart rate, systolic blood pressure, and the velocity and extent of myocardial contraction. Propranolol may increase oxygen requirements by increasing left ventricular fiber length, end diastolic pressure and systolic ejection period. The net physiologic effect of beta-adrenergic blockade is usually advantageous and is manifested during exercise by delayed onset of pain and increased work capacity.

In dosages greater than required for beta blockade, INDERAL also exerts a quinidine-like or anesthetic-like membrane action which affects the cardiac action potential. The significance of the membrane action in the treatment of arrhythmias is uncertain.

The mechanism of the antimigraine effect of propranolol has not been established. Beta-adrenergic receptors have been demonstrated in the pial vessels of the brain.

Beta receptor blockade can be useful in conditions in which, because of pathologic or functional changes, sympathetic activity is detrimental to the patient. But there are also situations in which sympathetic stimulation is vital. For example, in patients with severely damaged hearts, adequate ventricular function is maintained by virtue of sympathetic drive which should be preserved. In the presence of AV block, greater than first degree, beta blockade may prevent the necessary facilitating effect of sympathetic activity on conduction. Beta blockade results in bronchial constriction by interfering with adrenergic bronchodilator activity which should be preserved in patients subject to bronchospasm.

Propranolol is not significantly dialyzable.

INDICATIONS AND USAGE. Hypertension: INDERAL LA is indicated in the management of hypertension; it may be used alone or used in combination with other antihypertensive agents, particularly a thiazide diuretic. INDERAL LA is not indicated in the management of hypertensive emergencies.

Angina Pectoris Due to Coronary Atherosclerosis: INDERAL LA is indicated for the long-term management of patients with angina pectoris.

Migraine: INDERAL LA is indicated for the prophylaxis of common migraine headache. The efficacy of propranolol in the treatment of a migraine attack that has started has not been established and propranolol is not indicated for such use.

Hypertrophic Subaortic Stenosis: INDERAL LA is useful in the management of hypertrophic subaortic stenosis, especially for treatment of exertional or other stress-induced angina, palpitations, and syncope. INDERAL LA also improves exercise performance. The effectiveness of propranolol hydrochloride in this disease appears to be due to a reduction of the elevated outflow pressure gradient which is exacerbated by beta-receptor stimulation. Clinical improvement may be temporary.

CONTRAINDICATIONS. INDERAL is contraindicated in 1) cardiogenic shock; 2) sinus bradycardia and greater than first degree block; 3) bronchial asthma, 4) congestive heart failure (see WARNINGS) unless the failure is secondary to a tachyarrhythmia treatable with INDERAL.

WARNINGS. CARDIAC FAILURE: Sympathetic stimulation may be a vital component supporting circulatory function in patients with congestive heart failure, and its inhibition by beta blockade may precipitate more severe failure. Although beta blockers should be avoided in overt congestive heart failure, if necessary, they can be used with close follow-up in patients with a history of failure who are well compensated and are receiving digitalis and diuretics. Beta-adrenergic blocking agents do not abolish the inotropic action of digitalis on heart muscle.

IN PATIENTS WITHOUT A HISTORY OF HEART FAILURE, continued use of beta blockers can, in some cases, lead to cardiac failure. Therefore, at the first sign or symptom of heart failure, the patient should be digitalized and/or treated with diuretics, and the response observed closely, or INDERAL should be discontinued (gradually, if possible).

IN PATIENTS WITH ANGINA PECTORIS, there have been reports of exacerbation of angina and, in some cases, myocardial infarction, following abrupt discontinuance of INDERAL therapy. Therefore, when discontinuance of INDERAL is planned the dosage should be gradually reduced over at least a few weeks, and the patient should be cautioned against interruption or cessation of therapy without the physician's advice. If INDERAL therapy is interrupted and exacerbation of angina occurs, it usually is advisable to reinstitute INDERAL therapy and take other measures appropriate for the management of unstable angina pectoris. Since coronary artery disease may be unrecognized, it may be prudent to follow the above advice in patients considered at risk of having occult atherosclerotic heart disease who are given propranolol for other indications.

Nonallergic Bronchospasm (e.g., chronic bronchitis, emphysema)—PATIENTS WITH BRONCHOSPASTIC DISEASES SHOULD IN GENERAL NOT RECEIVE BETA BLOCKERS. INDERAL should be administered with caution since it may block bronchodilation produced by endogenous and exogenous catecholamine stimulation of beta receptors.

MAJOR SURGERY: The necessity or desirability of withdrawal of beta-blocking therapy prior to major surgery is controversial. It should be noted, however, that the impaired ability of the heart to respond to reflex adrenergic stimuli may augment the risks of general anesthesia and surgical procedures.

INDERAL (propranolol HCl), like other beta blockers, is a competitive inhibitor of beta-receptor agonists and its effects can be reversed by administration of such agents, e.g., dobutamine or isoproterenol. However, such patients may be subject to protracted severe hypotension. Difficulty in starting and maintaining the heartbeat has also been reported with beta blockers.

DIABETES AND HYPOGLYCEMIA: Beta-adrenergic blockade may prevent the appearance of certain premonitory signs and symptoms (pulse rate and pressure changes) of acute hypoglycemia in labile insulin-dependent diabetes. In these patients, it may be more difficult to adjust the dosage of insulin.

THYROTOXICOSIS: Beta blockade may mask certain clinical signs of hyperthyroidism. Therefore, abrupt withdrawal of propranolol may be followed by an exacerbation of symptoms of hyperthyroidism, including thyroid storm. Propranolol does not distort thyroid function tests.

IN PATIENTS WITH WOLFF-PARKINSON-WHITE SYNDROME, several cases have been reported in which, after propranolol, the tachycardia was replaced by a severe bradycardia requiring a demand pacemaker. In one case this resulted after an initial dose of 5 mg propranolol.

PRECAUTIONS. *General:* Propranolol should be used with caution in patients with impaired hepatic or renal function. INDERAL is not indicated for the treatment of hypertensive emergencies.

Beta adrenoreceptor blockade can cause reduction of intraocular pressure. Patients should be told that INDERAL may interfere with the glaucoma screening test. Withdrawal may lead to a return of increased intraocular pressure.

Clinical Laboratory Tests: Elevated blood urea levels in patients with severe heart disease, elevated serum transaminase, alkaline phosphatase, lactate dehydrogenase.

DRUG INTERACTIONS: Patients receiving catecholamine-depleting drugs such as reserpine should be closely observed if INDERAL is administered. The added catecholamine-blocking action may produce an excessive reduction of resting sympathetic nervous activity which may result in hypotension, marked bradycardia, vertigo, syncopal attacks, or orthostatic hypotension.

Carcinogenesis, Mutagenesis, Impairment of Fertility: Long-term studies in animals have been conducted to evaluate toxic effects and carcinogenic potential. In 18-month studies in both rats and mice, employing doses up to 150 mg/kg/day, there was no evidence of significant drug-induced toxicity. There were no drug-related tumorigenic effects at any of the dosage levels. Reproductive studies in animals did not show any impairment of fertility that was attributable to the drug.

Pregnancy: Pregnancy Category C. INDERAL has been shown to be embryotoxic in animal studies at doses about 10 times greater than the maximum recommended human dose. There are no adequate and well-controlled studies in pregnant women. INDERAL should be used during pregnancy only if the potential benefit justifies the potential risk to the fetus.

Nursing Mothers: INDERAL is excreted in human milk. Caution should be exercised when INDERAL is administered to a nursing woman.

Pediatric Use: Safety and effectiveness in children have not been established.

ADVERSE REACTIONS. Most adverse effects have been mild and transient and have rarely required the withdrawal of therapy.

Cardiovascular: bradycardia; congestive heart failure; intensification of AV block; hypotension; paresthesia of hands; thrombocytopenic purpura; arterial insufficiency, usually of the Raynaud type.

Central Nervous System: lightheadedness; mental depression manifested by insomnia, lassitude, weakness, fatigue; reversible mental depression progressing to catatonia; visual disturbances; hallucinations; an acute reversible syndrome characterized by disorientation for time and place, short-term memory loss, emotional lability, slightly clouded sensorium, and decreased performance on neuropsychometrics.

Gastrointestinal: nausea, vomiting, epigastric distress, abdominal cramping, diarrhea, constipation, mesenteric arterial thrombosis, ischemic colitis.

Allergic: pharyngitis and agranulocytosis, erythematous rash, fever combined with aching and sore throat, laryngospasm and respiratory distress.

Respiratory: bronchospasm.

Hematologic: agranulocytosis, nonthrombocytopenic purpura, thrombocytopenic purpura.

Auto-Immune: In extremely rare instances, systemic lupus erythematosus has been reported.

Miscellaneous: alopecia, LE-like reactions, psoriasiform rashes, dry eyes, male impotence, and Peyronie's disease have been reported rarely. Oculomucocutaneous reactions involving the skin, serous membranes and conjunctivae reported for a beta blocker (practolol) have not been associated with propranolol.

DOSAGE AND ADMINISTRATION. INDERAL LA provides propranolol hydrochloride in a sustained-release capsule for administration once daily. If patients are switched from INDERAL tablets to INDERAL LA capsules, care should be taken to assure that the desired therapeutic effect is maintained. INDERAL LA should not be considered a simple mg for mg substitute for INDERAL. INDERAL LA has different kinetics and produces lower blood levels. Retitration may be necessary especially to maintain effectiveness at the end of the 24-hour dosing interval.

HYPERTENSION—*Dosage must be individualized.* The usual initial dosage is 80 mg INDERAL LA once daily, whether used alone or added to a diuretic. The dosage may be increased to 120 mg once daily or higher until adequate blood-pressure control is achieved. The usual maintenance dosage is 120 to 160 mg once daily. In some instances a dosage of 640 mg may be required. The time needed for full hypertensive response to a given dosage is variable and may range from a few days to several weeks.

ANGINA PECTORIS—*Dosage must be individualized.* Starting with 80 mg INDERAL LA once daily, dosage should be gradually increased at three to seven day intervals until optimum response is obtained. Although individual patients may respond at any dosage level, the average optimum dosage appears to be 160 mg once daily. In angina pectoris, the value and safety of dosage exceeding 320 mg per day have not been established.

If treatment is to be discontinued, reduce dosage gradually over a period of a few weeks (see WARNINGS).

MIGRAINE—*Dosage must be individualized.* The initial oral dose is 80 mg INDERAL LA once daily. The usual effective dose range is 160-240 mg once daily. The dosage may be increased gradually to achieve optimum migraine prophylaxis. If a satisfactory response is not obtained within four to six weeks after reaching the maximum dose, INDERAL LA therapy should be discontinued. It may be advisable to withdraw the drug gradually over a period of several weeks.

HYPERTROPHIC SUBAORTIC STENOSIS—80-160 mg INDERAL LA once daily

PEDIATRIC DOSAGE—At this time the data on the use of the drug in this age group are too limited to permit adequate directions for use.

*The appearance of INDERAL LA capsules is a registered trademark of Ayerst Laboratories.

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Ayerst® AYERST LABORATORIES
New York, N.Y. 10017

MEMBERSHIP NEWSLETTER

MSNJ

THE MEDICAL SOCIETY OF NEW JERSEY VOLUME 20

PROFESSIONAL LIABILITY CRISIS

Professional liability rates in New Jersey will rise an average of 24 percent for Medical Inter-Insurance Exchange of New Jersey (MIIENJ) insureds on February 1, 1985. Severity and frequency of claims are rising dramatically. MSNJ and the MIIENJ jointly are working on tort reform and risk prevention measures. New Jersey physicians will be asked to commit their time and energy toward resolving this problem.

PRO IN NEW JERSEY

MSNJ held a series of meetings on PRO implementation in New Jersey. The meetings were open to the membership and were held on: February 1, 1985, at MSNJ headquarters; February 9, 1985, at the Saddlebrook Marriott; and February 10, 1985, at the Sheraton Poste in Cherry Hill.

The Society will seek to coordinate its efforts with the AMA which adopted the following resolutions in December 1984:

> Resolved, that the AMA continue its support for professionally directed programs of medical peer review which place the emphasis on quality rather than cost; and be it further
>
> Resolved, that the AMA actively oppose the Health Care Financing Administration's continued use of arbitrary admission and quality objectives in the activities of Professional Review Organizations (PROs); and be it further
>
> Resolved, that the AMA implement a PRO monitoring system within the federation to obtain documentation necessary to redress PRO implementation problems through legislative and regulatory means; and be it further
>
> Resolved, that the AMA urge the federation to collect and provide information to the Association documenting PRO implementation problems and deficiencies; and be it further
>
> Resolved, that the AMA actively seek legislation to correct demonstrated inequities in the implementation of the PRO program.

Substitute Resolution 10 adopted.

Resolution 103 asked that the AMA petition the Health Care Financing Administration to establish a mechanism for discussion and resolution of Professional Review Organization issues between HCFA, the PRO, and the practitioner.

The House of Delegates amended Resolution 103 to read as follows:

> "Resolved, that the American Medical Association petition the Health Care Financing Administration (HCFA) that for those instances in which Medicare guidelines appear to be medically unsound or contrary to principles of practice there be established a prompt easy-access mechanism for discussion of and resolution of differences between HCFA, the Peer Review Organizations (PROs), and the practitioners of medicine."

Resolution 103 adopted as amended.

STATE REINSURANCE ASSOCIATION PROBLEMS

The State Reinsurance Association which no longer is actively writing insurance has declared a $55 million deficit. The Commissioner of Insurance is expected to announce a formula of assessment to meet or reduce the deficit. MIIENJ strongly is maintaining its insureds cannot be held subject to that assessment.

TRAINING SEMINAR

The AMA is offering a media training conference at the San Diego Sheraton Harbor Island East Hotel from May 2 to 5, 1985. For registration contact the Speakers Training/Health Reporting Conference, AMA, Room 4278, 535 North Dearborn, Chicago, IL 60610.

COMMERCIAL ALLERGY TESTING

Teams of business people, moving from town to town, and representing themselves to the public as legitimate medical workers, are making lots of money by running so called "cytotoxic" food allergy tests on people's blood.

As reported by *Medical World News* (25:22, 1984), this is a franchised business that has no valid scientific basis and which recently has been denounced by the American Association of Allergists and Immunologists, the American College of Chest Physicians, and the U.S. Food and Drug Administration.

Attendance at Board of Trustees' Meetings: County Societies
July 1984-December 1984

Atlantic County

September 16	Alan J. Simpson, M.D., President

Bergen County

July 15	Marc J. Crilly, M.D., President
September 16	Christopher T. Reilly, M.D., President-Elect
October 21	Marc J. Crilly, M.D., President
	Christopher T. Reilly, M.D., President-Elect
November 18	Bernard Gardner, M.D.
	John G. Nagel, M.D.
	Christopher T. Reilly, M.D., President-Elect
December 16	Christopher T. Reilly, M.D., President-Elect

Burlington County

July 15	Charles J. Moloney, M.D.
September 16	Rodolfo C. Pascual, M.D., President
October 21	Rodolfo C. Pascual, M.D., President
November 18	Rodolfo C. Pascual, M.D., President

Camden County

July 15	August P. Ciell, M.D., President
September 16	August P. Ciell, M.D. President
November 18	August P. Ciell, M.D., President
	Joseph A. Riggs, M.D., President-Elect
	Martin Swiecicki, M.D.
December 16	Emmons G. Paine, M.D.
	Joseph A. Riggs, M.D., President-Elect

Essex County

July 15	Carolyn W. Watson, M.D.
September 16	Carolyn W. Watson, M.D.
October 21	Charles H. Arnoldi, Jr., M.D., President-Elect
	Carolyn W. Watson, M.D.
November 18	Carolyn W. Watson, M.D.
December 16	Carolyn W. Watson, M.D.

Gloucester County

September 16	Churchill L. Blakey, M.D., President-Elect
October 21	Churchill L. Blakey, M.D., President-Elect
December 26	Churchill L. Blakey, M.D., President-Elect

Hudson County

July 15	Charles L. Cunniff, M.D.
September 16	Charles L. Cunniff, M.D.
October 21	Janet Geraghty-Deutsch, M.D.
November 18	Charles L. Cunniff, M.D.
	Frank J. Primich, M.D.
December 16	Charles L. Cunniff, M.D.
	Frank J. Primich, M.D.

Hunterdon County

December 16	Gerald Barad, M.D., President

Mercer County

July 15	Ariel F. Abud, M.D., President
	Mrs. Joey Huddy, Exective Secretary
	Ms. Anne Petchel
October 21	Ariel F. Abud, M.D., President
	Mrs. Joey Huddy, Executive Secretary
November 18	Mrs. Joey Huddy, Executive Secretary
December 16	Mrs. Joey Huddy, Executive Secretary

Middlesex County

July 15	Mrs. Mary Alice Bruno, Executive Director
	Norval F. Kemp, M.D., President
September 16	Mrs. Mary Alice Bruno, Executive Director
October 21	Mrs. Mary Alice Bruno, Executive Director
November 18	Mrs. Mary Alice Bruno, Executive Director
	Joseph P. Zawadsky, M.D., President-Elect
December 16	Mrs. Mary Alice Bruno, Executive Director
	Ariel P. Solis, M.D.
	Joseph P. Zawadsky, M.D., President-Elect

Monmouth County

July 15	Birute S. Preikstas, M.D.
September 16	Mrs. Patricia Klemm, Executive Secretary
October 21	Mrs. Patricia Klemm, Executive Secretary
November 18	Robert W. Ackerman, M.D., President
December 16	Ali Ahmadifar, M.D.
	John E. Bocker, M.D.
	Henry M. Bowers, Jr., M.D.
	Mrs. Patricia Klemm, Executive Secretary
	Merritt E. London, M.D., President-Elect

Morris County

September 16	James B. Massengill, M.D., President-Elect
October 21	Richard B. Einaugler, M.D.
November 18	Michael A. Samach, M.D.
December 16	Michael R. Henderson, M.D., Secretary

Ocean County

July 15	Ira J. Holzman, M.D.
September 16	Ira J. Holzman, M.D.
October 21	Ira J. Holzman, M.D.
November 18	Ira J. Holzman, M.D.
December 16	Ira J. Holzman, M.D.

Passaic County

September 16	David J. Blackman, M.D., President
	Mr. William T. McGuire, Executive Director
October 21	David J. Blackman, M.D., President
November 18	Mr. William T. McGuire, Executive Director
December 16	Mr. William T. McGuire, Executive Director

Union County

July 15	Frank R. Romano, Sr., M.D., Past President
	Mrs. Ethel Stevens, Executive Director
September 16	Mrs. Ethel Stevens, Executive Director
October 21	Philip S. Green, M.D.
	Frank J. Laudonio, M.D.
	Mrs. Ethel Stevens, Executive Director
November 18	Frank R. Romano, Sr., M.D., Past President
December 16	Frank R. Romano, Sr., M.D., Past President
	Richard E. Sharrett, M.D., President
	Mrs. Ethel Stevens, Executive Director

Attendance at Board of Trustees' Meetings: Specialty Societies, The Academy of Medicine of New Jersey, and Auxiliary

July 1984-December 1984

New Jersey State Society of Anesthesiologists

July 15	Stanley Bresticker, M.D.
September 16	Stanley Bresticker, M.D.
October 21	Stanley Bresticker, M.D.
November 18	Stanley Bresticker, M.D.
December 16	Stanley Bresticker, M.D.

New Jersey Chapter, American College of Chest Physicians

September 16	Mohamad Sarraf, M.D., Vice President
	Ellis P. Singer, M.D., President

New Jersey Dermatological Society

July 15	Frederic Haberman, M.D., President
September 16	Frederic Haberman, M.D., President
November 18	Frederic Haberman, M.D., President

New Jersey Chapter, American College of Emergency Physicians

July 15	Rudolf E. Schwaeble, M.D.
September 16	Rudolf E. Schwaeble, M.D.
October 21	Rudolf E. Schwaeble, M.D.
November 18	Rudolf E. Schwaeble, M.D.
December 16	Rudolf E. Schwaeble, M.D.

New Jersey Academy of Family Physicians

July 15	George L. Triebenbacher, M.D., President

New Jersey Society of Internal Medicine

July 15	Frank J. Malta, M.D.
September 16	Frank J. Malta, M.D.
November 18	Frank J. Malta, M.D.
	Huerta C. Neals, M.D., President-Elect
December 16	Richard E. Dixon, M.D.
	Huerta C. Neals, M.D., President-Elect

New Jersey Association of Medical Specialty Societies

July 15	Stanley Bresticker, M.D.
	Frank J. Malta, M.D., President
September 16	Stanley Bresticker, M.D.
	Frank J. Malta, M.D., President
October 21	Stanley Bresticker, M.D.
November 18	Stanley Bresticker, M.D.
	Frank J. Malta, M.D., President
December 16	Stanley Bresticker, M.D.

New Jersey Medical Women's Association

September 16	Roberta G. Rubin, M.D.

New Jersey Obstetrical and Gynecological Society

July 15	John D. Franzoni, M.D.
October 21	John D. Franzoni, M.D.
December 16	John D. Franzoni, M.D.
	Robert Malatesta, M.D., President

New Jersey Orthopaedic Society

September 16	Edmund R. Kappy, M.D., President

New Jersey Society of Pathologists

July 15	Frank Campo, M.D., Vice President
October 21	Frank Campo, M.D., Vice President
December 16	Frank Campo, M.D., Vice President

New Jersey Society of Physical Medicine and Rehabilitation

July 15	Robert Iskowitz, M.D., Member-at-Large
September 16	Robert Iskowitz, M.D., Member-at-Large
November 18	Robert Iskowitz, M.D., Member-at-Large

New Jersey Society of Plastic and Reconstructive Surgeons

September 16	Joseph Jasaitis, M.D., President
December 16	Joseph Jasaitis, M.D., President

Radiological Society of New Jersey

September 16	Gilbert Melnick, M.D., President-Elect

New Jersey Rheumatism Association

July 15	William E. Ryan, M.D., Liaison
September 16	William E. Ryan, M.D., Liaison
October 21	William E. Ryan, M.D., Liaison
November 18	William E. Ryan, M.D., Liaison
December 16	William E. Ryan, M.D., Liaison

New Jersey Chapter, American College of Surgeons

July 15	Francis E. Barse, M.D.
December 16	Anita Falla, M.D., President

Vascular Society of New Jersey

September 16	Charles Moss, M.D., President-Elect
November 18	Charles Moss, M.D., President-Elect

The Academy of Medicine of New Jersey

July 15	Sherman Garrison, M.D.
	Mr. Charles J. Heitzmann, Executive Director
	Mr. Joseph R. Ruggles
September 16	Sherman Garrison, M.D.
	Mr. Charles J. Heitzmann, Executive Director
October 21	Sherman Garrison, M.D.
November 18	Sherman Garrison, M.D.
	Mr. Charles J. Heitzmann, Executive Director
December 16	Sherman Garrison, M.D.
	Mr. Charles J. Heitzmann, Executive Director
	Robert S. Rigolosi, M.D., President

Medical Society of New Jersey Auxiliary

July 15	Mrs. Bernardine Moloney, President-Elect
September 16	Mrs. William Gellman, President
October 21	Mrs. William Gellman, President
November 18	Mrs. William Gellman, President
	Mrs. Bernardine Moloney, President-Elect
December 16	Mrs. William Gellman, President

The Government, furthermore, has published a notice in the *Federal Register* that it proposes to stop making Medicare payments for any of these tests.

Depending heavily on advertising, the teams usually include nurses and lab technicians (but no licensed physicians) who talk people into having blood drawn for tests, they claim, which will detect all of the food allergies that one may have. The average person who undergoes these tests spends $325 for blood drawing and lab fees, and the teams typically collect about $10,000 every night from groups of about 30 people.

AMA REPORTS

Report D of Judicial Council: Ethical Implications of Hospital-Physician Risk-Sharing Arrangements Under DRGs. Report D of the Judicial Council discussed ethical implications of hospital-physician risk-sharing arrangements under the diagnosis related group (DRG) reimbursement system, concluding that the Council is opposed to risk-sharing arrangements between hospitals and medical staff whereby the physician may profit or lose from the DRG allowance to

the hospital. Report D of Judicial Council adopted, and to be publicized widely to the Health Care Financing Administration and legislative bodies.

AMA House Adopted Resolution on Federal Mandate for Pluralism. Resolution 27 requested that the AMA seek legislation requiring employers of 25 or more people to offer various types of health delivery configurations. The House of Delegates amended Resolution 27 to read as follows: "Resolved, that the American Medical Association seek to have legislation enacted that would mandate employers of 25 or more persons, that choose to offer health insurance to their employees, to offer various types of health delivery configurations such as traditional indemnity insurance in the same sense that a Health Maintenance Organization (HMO) alternative currently is mandated." Resolution 27 adopted as amended.

AMA Comments on Medicare Discrimination. Resolution 58 asks the AMA to publicize the defects of the Medicare fee freeze law and its provisions on acceptance of assignment and to continue to support the direct billing of patients. The House of Delegates considered the following Substitute Resolution 58: "Resolved, that the American Medical Association continue to publicize the discriminatory aspects of recent changes in the Medicare law which provide sanctions and penalties against physicians who do not contract with the government." Substitute Resolution 58 adopted.

AMA Votees To Continue Dialogue with the American Association of Retired Persons. Resolution 46 called upon the AMA 1) to explain to the American Association of Retired Persons (AARP) the AMA policy on balance billing, 2) to publish a pamphlet explaining its position on balance billing, and 3) to ask the AARP either to include this pamphlet in a mailing to its members or to provide the AMA with AARP mailing lists. The House of Delegates considered the following Substitute Resolution 46: "Resolved, that the American Medical Association continue its dialogue with the American Association of Retired Persons (AARP), with particular emphasis on relaying Association policies regarding the reimbursement of physicians; and be it further Resolved, that the Board of Trustees report to the House Delegates on the current status of this dialogue at the 1985 Annual Meeting." Substitute Resolution 46 adopted.

BALANCED CALCIUM CHANNEL BLOCKADE!



CARDIZEM®
(diltiazem HCl)

balances potent coronary vasodilation with a low incidence of side effects

Low incidence of side effects
CARDIZEM® (diltiazem HCl) produces an incidence of adverse reactions not greater than that reported with placebo therapy, thus contributing to the patient's sense of well-being.

Reduces angina attack frequency*
42% to 46% decrease reported in multicenter study.[1]

Increases exercise tolerance*
In Bruce exercise test,[2] control patients averaged 8.0 minutes to onset of pain; Cardizem patients averaged 9.8 minutes ($P<.005$).

*Cardizem is indicated in the treatment of angina pectoris due to coronary artery spasm and in the management of chronic stable angina (classic effort-associated angina) in patients who cannot tolerate therapy with beta-blockers and/or nitrates or who remain symptomatic despite adequate doses of these agents.

References:
1. Strauss WE, McIntyre KM, Parisi AF, et al: Safety and efficacy of diltiazem hydrochloride for the treatment of stable angina pectoris: Report of a cooperative clinical trial. Am J Cardiol 49:560-566, 1982.
2. Pool PE, Seagren SC, Bonanno JA, et al: The treatment of exercise-inducible chronic stable angina with diltiazem: Effect on treadmill exercise. Chest 78 (July suppl):234-238, 1980.

CARDIZEM®
(diltiazem HCl)

THE BALANCED CALCIUM CHANNEL BLOCKER

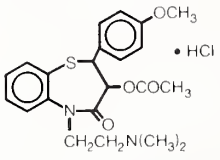
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PROFESSIONAL USE INFORMATION

cardizem®
(diltiazem HCl)
30 mg and 60 mg tablets

DESCRIPTION

CARDIZEM® (diltiazem hydrochloride) is a calcium ion influx inhibitor (slow channel blocker or calcium antagonist). Chemically, diltiazem hydrochloride is 1,5-Benzothiazepin-4(5H)one,3-(acetyloxy) -5-[2-(dimethylamino)ethyl]-2,3-dihydro-2-(4-methoxyphenyl)-, monohydrochloride,(+)-cis-. The chemical structure is:



Diltiazem hydrochloride is a white to off-white crystalline powder with a bitter taste. It is soluble in water, methanol, and chloroform. It has a molecular weight of 450.98. Each tablet of CARDIZEM contains either 30 mg or 60 mg diltiazem hydrochloride for oral administration.

CLINICAL PHARMACOLOGY

The therapeutic benefits achieved with CARDIZEM are believed to be related to its ability to inhibit the influx of calcium ions during membrane depolarization of cardiac and vascular smooth muscle.

Mechanisms of Action. Although precise mechanisms of its antianginal actions are still being delineated, CARDIZEM is believed to act in the following ways:

1. Angina Due to Coronary Artery Spasm: CARDIZEM has been shown to be a potent dilator of coronary arteries both epicardial and subendocardial. Spontaneous and ergonovine-induced coronary artery spasm are inhibited by CARDIZEM.
2. Exertional Angina: CARDIZEM has been shown to produce increases in exercise tolerance, probably due to its ability to reduce myocardial oxygen demand. This is accomplished via reductions in heart rate and systemic blood pressure at submaximal and maximal exercise work loads.

In animal models, diltiazem interferes with the slow inward (depolarizing) current in excitable tissue. It causes excitation-contraction uncoupling in various myocardial tissues without changes in the configuration of the action potential. Diltiazem produces relaxation of coronary vascular smooth muscle and dilation of both large and small coronary arteries at drug levels which cause little or no negative inotropic effect. The resultant increases in coronary blood flow (epicardial and subendocardial) occur in ischemic and nonischemic models and are accompanied by dose-dependent decreases in systemic blood pressure and decreases in peripheral resistance.

Hemodynamic and Electrophysiologic Effects. Like other calcium antagonists, diltiazem decreases sinoatrial and atrioventricular conduction in isolated tissues and has a negative inotropic effect in isolated preparations. In the intact animal, prolongation of the AH interval can be seen at higher doses.

In man, diltiazem prevents spontaneous and ergonovine-provoked coronary artery spasm. It causes a decrease in peripheral vascular resistance and a modest fall in blood pressure and, in exercise tolerance studies in patients with ischemic heart disease, reduces the heart rate-blood pressure product for any given work load. Studies to date, primarily in patients with good ventricular function, have not revealed evidence of a negative inotropic effect; cardiac output, ejection fraction, and left ventricular end diastolic pressure have not been affected. There are as yet few data on the interaction of diltiazem and beta-blockers. Resting heart rate is usually unchanged or slightly reduced by diltiazem.

Intravenous diltiazem in doses of 20 mg prolongs AH conduction time and AV node functional and effective refractory periods approximately 20%. In a study involving single oral doses of 300 mg of CARDIZEM in six normal volunteers, the average maximum PR prolongation was 14% with no instances of greater than first-degree AV block. Diltiazem-associated prolongation of the AH interval is not more pronounced in patients with first-degree heart block. In patients with sick sinus syndrome, diltiazem significantly prolongs sinus cycle length (up to 50% in some cases).

Chronic oral administration of CARDIZEM in doses of up to 240 mg/day has resulted in small increases in PR interval, but has not usually produced abnormal prolongation. There were, however, three instances of second-degree AV block and one instance of third-degree AV block in a group of 959 chronically treated patients.

Pharmacokinetics and Metabolism. Diltiazem is absorbed from the tablet formulation to about 80% of a reference capsule and is subject to an extensive first-pass effect, giving an absolute bioavailability (compared to intravenous dosing) of about 40%. CARDIZEM undergoes extensive hepatic metabolism in which 2% to 4% of the unchanged drug appears in the urine. In vitro binding studies show CARDIZEM is 70% to 80% bound to plasma proteins. Competitive ligand binding studies have also shown CARDIZEM binding is not altered by therapeutic concentrations of digoxin, hydrochlorothiazide, phenylbutazone, propranolol, salicylic acid, or warfarin. Single oral doses of 30 to 120 mg of CARDIZEM result in detectable plasma levels within 30 to 60 minutes and peak plasma levels two to three hours after drug administration. The plasma elimination half-life following single or multiple drug administration is approximately 3.5 hours. Desacetyl diltiazem is also present in the plasma at levels of 10% to 20% of the parent drug and is 25% to 50% as potent a coronary vasodilator as diltiazem. Therapeutic blood levels of CARDIZEM appear to be in the range of 50 to 200 ng/ml. There is a departure from dose-linearity when single doses above 60 mg are given; a 120-mg dose gave blood levels three times that of the 60-mg dose. There is no information about the effect of renal or hepatic impairment on excretion or metabolism of diltiazem.

INDICATIONS AND USAGE

1. **Angina Pectoris Due to Coronary Artery Spasm.** CARDIZEM is indicated in the treatment of angina pectoris due to coronary artery spasm. CARDIZEM has been shown effective in the treatment of spontaneous coronary artery spasm presenting as Prinzmetal's variant angina (resting angina with ST-segment elevation occurring during attacks).
2. **Chronic Stable Angina (Classic Effort-Associated Angina).** CARDIZEM is indicated in the management of chronic stable angina. CARDIZEM has been effective in controlled trials in reducing angina frequency and increasing exercise tolerance.

There are no controlled studies of the effectiveness of the concomitant use of diltiazem and beta-blockers or of the safety of this combination in patients with impaired ventricular function or conduction abnormalities.

CONTRAINDICATIONS

CARDIZEM is contraindicated in (1) patients with sick sinus syndrome except in the presence of a functioning ventricular pacemaker, (2) patients with second- or third-degree AV block except in the presence of a functioning ventricular pacemaker, and (3) patients with hypotension (less than 90 mm Hg systolic).

WARNINGS

1. **Cardiac Conduction.** CARDIZEM prolongs AV node refractory periods without significantly prolonging sinus node recovery time, except in patients with sick sinus syndrome. This effect may rarely result in abnormally slow heart rates (particularly in patients with sick sinus syndrome) or second- or third-degree AV block (six of 1243 patients for 0.48%). Concomitant use of diltiazem with beta-blockers or digitalis may result in additive effects on cardiac conduction. A patient with Prinzmetal's angina developed periods of asystole (2 to 5 seconds) after a single dose of 60 mg of diltiazem.
2. **Congestive Heart Failure.** Although diltiazem has a negative inotropic effect in isolated animal tissue preparations, hemodynamic studies in humans with normal ventricular function have not shown a reduction in cardiac index nor consistent negative effects on contractility (dp/dt). Experience with the use of CARDIZEM alone or in combination with beta-blockers in patients with impaired ventricular function is very limited. Caution should be exercised when using the drug in such patients.
3. **Hypotension.** Decreases in blood pressure associated with CARDIZEM therapy may occasionally result in symptomatic hypotension.
4. **Acute Hepatic Injury.** In rare instances, patients receiving CARDIZEM have exhibited reversible acute hepatic injury as evidenced by moderate to extreme elevations of liver enzymes. (See PRECAUTIONS and ADVERSE REACTIONS.)

PRECAUTIONS

General. CARDIZEM (diltiazem hydrochloride) is extensively metabolized by the liver and excreted by the kidneys and in bile. As with any new drug given over prolonged periods, laboratory parameters should be monitored at regular intervals. The drug should be used with caution in patients with impaired renal or hepatic function. In subacute and chronic dog and rat studies designed to produce toxicity, high doses of diltiazem were associated with hepatic damage. In special subacute hepatic studies, oral doses of 125 mg/kg and higher in rats were associated with histological changes in the liver which were reversible when the drug was discontinued. In dogs, doses of 20 mg/kg were also associated with hepatic changes; however, these changes were reversible with continued dosing.

Drug Interaction. Pharmacologic studies indicate that there may be additive effects in prolonging AV conduction when using beta-blockers or digitalis concomitantly with CARDIZEM. (See WARNINGS).

Controlled and uncontrolled domestic studies suggest that concomitant use of CARDIZEM and beta-blockers or digitalis is usually well tolerated. Available data are not sufficient, however, to predict the effects of concomitant treatment, particularly in patients with left ventricular dysfunction or cardiac conduction abnormalities. In healthy volunteers, diltiazem has been shown to increase serum digoxin levels up to 20%.

Carcinogenesis, Mutagenesis, Impairment of Fertility. A 24-month study in rats and a 21-month study in mice showed no evidence of carcinogenicity. There was also no mutagenic response in in vitro bacterial tests. No intrinsic effect on fertility was observed in rats.

Pregnancy. Category C. Reproduction studies have been conducted in mice, rats, and rabbits. Administration of doses ranging from five to ten times greater (on a mg/kg basis) than the daily recommended therapeutic dose has resulted in embryo and fetal lethality. These doses, in some studies, have been reported to cause skeletal abnormalities. In the perinatal/postnatal studies, there was some reduction in early individual pup weights and survival rates. There was an increased incidence of stillbirths at doses of 20 times the human dose or greater.

There are no well-controlled studies in pregnant women; therefore, use CARDIZEM in pregnant women only if the potential benefit justifies the potential risk to the fetus.

Nursing Mothers. It is not known whether this drug is excreted in human milk. Because many drugs are excreted in human milk, exercise caution when CARDIZEM is administered to a nursing woman if the drug's benefits are thought to outweigh its potential risks in this situation.

Pediatric Use. Safety and effectiveness in children have not been established.

ADVERSE REACTIONS

Serious adverse reactions have been rare in studies carried out to date, but it should be recognized that patients with impaired ventricular function and cardiac conduction abnormalities have usually been excluded.

In domestic placebo-controlled trials, the incidence of adverse reactions reported during CARDIZEM therapy was not greater than that reported during placebo therapy.

The following represent occurrences observed in clinical studies which can be at least reasonably associated with the pharmacology of calcium influx inhibition. In many cases, the relationship to CARDIZEM has not been established. The most common occurrences, as well as their frequency of presentation, are: edema (2.4%), headache (2.1%), nausea (1.9%), dizziness (1.5%), rash (1.3%), asthenia (1.2%), AV block (1.1%). In addition, the following events were reported infrequently (less than 1%) with the order of presentation corresponding to the relative frequency of occurrence.

Cardiovascular:	Flushing, arrhythmia, hypotension, bradycardia, palpitations, congestive heart failure, syncope.
Nervous System:	Paresthesia, nervousness, somnolence, tremor, insomnia, hallucinations, and amnesia.
Gastrointestinal:	Constipation, dyspepsia, diarrhea, vomiting, mild elevations of alkaline phosphatase, SGOT, SGPT, and LDH.
Dermatologic:	Pruritus, petechiae, urticaria, photosensitivity.
Other:	Polyuria, nocturia.

The following additional experiences have been noted:

A patient with Prinzmetal's angina experiencing episodes of vasospastic angina developed periods of transient asymptomatic asystole approximately five hours after receiving a single 60-mg dose of CARDIZEM.

The following postmarketing events have been reported infrequently in patients receiving CARDIZEM: erythema multiforme; leukopenia; and extreme elevations of alkaline phosphatase, SGOT, SGPT, LDH, and CPK. However, a definitive cause and effect between these events and CARDIZEM therapy is yet to be established.

OVERDOSAGE OR EXAGGERATED RESPONSE

Overdosage experience with oral diltiazem has been limited. Single oral doses of 300 mg of CARDIZEM have been well tolerated by healthy volunteers. In the event of overdosage or exaggerated response, appropriate supportive measures should be employed in addition to gastric lavage. The following measures may be considered:

Bradycardia	Administer atropine (0.60 to 1.0 mg). If there is no response to vagal blockade, administer isoproterenol cautiously.
High-Degree AV Block	Treat as for bradycardia above. Fixed high-degree AV block should be treated with cardiac pacing.
Cardiac Failure	Administer inotropic agents (isoproterenol, dopamine, or dobutamine) and diuretics.
Hypotension	Vasopressors (eg, dopamine or levarterenol bitartrate).

Actual treatment and dosage should depend on the severity of the clinical situation and the judgment and experience of the treating physician.

The oral LD_{50}'s in mice and rats range from 415 to 740 mg/kg and from 560 to 810 mg/kg, respectively. The intravenous LD_{50}'s in these species were 60 and 38 mg/kg, respectively. The oral LD_{50} in dogs is considered to be in excess of 50 mg/kg, while lethality was seen in monkeys at 360 mg/kg. The toxic dose in man is not known, but blood levels in excess of 800 ng/ml have not been associated with toxicity.

DOSAGE AND ADMINISTRATION

Exertional Angina Pectoris Due to Atherosclerotic Coronary Artery Disease or Angina Pectoris at Rest Due to Coronary Artery Spasm. Dosage must be adjusted to each patient's needs. Starting with 30 mg four times daily, before meals and at bedtime, dosage should be increased gradually (given in divided doses three or four times daily) at one- to two-day intervals until optimum response is obtained. Although individual patients may respond to any dosage level, the average optimum dosage range appears to be 180 to 240 mg/day. There are no available data concerning dosage requirements in patients with impaired renal or hepatic function. If the drug must be used in such patients, titration should be carried out with particular caution.

Concomitant Use With Other Antianginal Agents:

1. **Sublingual NTG** may be taken as required to abort acute anginal attacks during CARDIZEM therapy.
2. **Prophylactic Nitrate Therapy**—CARDIZEM may be safely coadministered with short- and long-acting nitrates, but there have been no controlled studies to evaluate the antianginal effectiveness of this combination.
3. **Beta-blockers.** (See WARNINGS and PRECAUTIONS.)

HOW SUPPLIED

Cardizem 30-mg tablets are supplied in bottles of 100 (NDC 0088-1771-47) and in Unit Dose Identification Paks of 100 (NDC 0088-1771-49). Each green tablet is engraved with MARION on one side and 1771 engraved on the other. CARDIZEM 60-mg scored tablets are supplied in bottles of 100 (NDC 0088-1772-47) and in Unit Dose Identification Paks of 100 (NDC 0088-1772-49). Each yellow tablet is engraved with MARION on one side and 1772 on the other.

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PROFESSIONAL LIABILITY COMMENTARY*

Suits and Settlements

Current Liability Crisis; Pre-Verdict Settlement; Asbestos Claims; Slander Suit

The current medical liability crisis is one of "affordability not availability," according to James Todd, M.D., president of the Physician Insurance Association of America (PIAA). Dr. Todd addressed members of the Council of Medical Specialty Societies (CMSS) who were attending the CMSS National Conference on professional liability.

Dr. Todd explored the issues surrounding the present liability crisis, including continued increases in the number of suits filed, increases in the size of awards granted, inequities in the tort system which permit 60 percent of liability premium dollars to go to the legal profession, and unreasonable expectations on the part of the public as to the outcome of medical intervention.

"Negligence does occur," according to Dr. Todd, "and patients who suffer injuries should receive prompt and fair compensation. However, only through tort reform such as structured settlements, limits on non-economic losses (pain and suffering), and controls on expert witnesses can the current affordability crisis be addressed."

Dr. Todd urged insurers and medical professionals to work together to educate the public and the profession about the extent of the problem. He spoke about the need to modify the behavior of professionals to prevent injuries, and encouraged the development of data collection mechanisms to permit analysis of clinical problem areas and the liability implications of the new medical technologies.

David Sundwall, M.D., staff assistant to Senator Orrin Hatch of Utah, and Charles N. Kahn, staff assistant to Senator David Durenberger of Minnesota, discussed current congressional views on tort reform. Dr. Sundwall said testimony by the AMA estimated the cost of defensive medicine to the federal treasury at $15 billion. According to Dr. Sundwall, members of the American Trial Lawyers Association asserted at the same meeting that, in view of the number of patients injured, present insurance premiums are a bargain.

"There is no national consensus concerning the problem of professional liability," explained Dr. Sundwall. "Until there is, very little in the way of legislative remediation can be effected."

Dr. Sundwall stated that data support the positive effects of certain reforms, such as contingency fee limits, caps on awards, and limitations of punitive damages. He also suggested that a system of "medical adversity" or "no-fault" insurance might be worth exploring. However, he continued, the difficulty of designating compensable events or assigning dollar values to adverse outcomes, and of protecting the patient's constitutional right of access to the court needs careful scrutiny.

Mr. Kahn said Congress is receiving mixed messages about the liability problem. In his view, the only way to get a handle on the issue is to study cost and quality in greater detail. Above all, he urged physicians to study regional variations in medical care, as described in the work of John Wennberg, M.D., which was published in the August 2, 1984, issue of the *New England Journal of Medicine*. Dr. Wennberg's work raises tremendous questions about the medical profession's assurances concerning the quality of care delivered in the United States.

Willie Brown, Jr., speaker of the California Assembly, reiterated the need for good, solid data on the issue of professional liability. He doubted that a fixed value could be placed upon a specific injury, such as values proposed under no-fault insurance plans, and he urged physician groups to approach legislators not as spokesmen for their special interests, but as experts with proved solutions to the problems.

The need for this type of approach was disputed by William Curran, professor of law at Harvard University. According to Mr. Curran, "The legislative process, like the legal system, is adversarial, and physicians should not be expected to take a balanced view. They must present their own viewpoints in the national debate on tort reform because nobody else will."

Mr. Curran went on to say that he does not expect significant tort reform to occur for at least a decade. "Time has eroded many of the rules of law that previously limited physicians' exposure to legal action on the grounds of malpractice, and it is not likely that the pendulum will swing back in the other direction for some time," he said. "Judges and juries now are setting standards of care that used to be determined by physicians."

Mr. Curran discussed options for altering the sys-

*This item from the Department of Professional Liability Control, MSNJ, was prepared by James E. George, M.D., J.D., and A. Ronald Rouse, who are, respectively, Director of the Department and Director of Special Projects.

tem, including introducing no-fault legislation; not using juries in malpractice trials; providing for government reinsurance for claims above $50,000; instituting effective screening panels; effectively encouraging settlement; providing for corporate liability and structured awards; instituting effective risk management, quality assurance, and physician discipline programs; and effecting tort law reform.

According to Mr. Curran, the implementation of a no-fault system would signal the complete loss by society of confidence in medicine. "Since quality is the basis of the fault system, physicians should work to maintain a fault-based system while striving to attain a national norm of prudent medical practice. Physicians need to get back into the business of setting the standards of care," he said.

The September 24 to 25, 1984, conference was cosponsored by PIAA and 13 CMSS member specialty societies and attended by approximately 150 representatives from specialty medicine, physician-owned and commercial insurance companies, the legal profession, and the media (*American College of Emergency Physicians*, Vol. 3, No. 12, December 1984).

$2.7 MILLION PRE-VERDICT SETTLEMENT

Despite the fact that cessation of respiration leading to permanent brain damage occurred in a hospital recovery room, a Washington, D.C. plastic surgeon and his assistant and anesthesiologist were parties to a $2.7 million settlement in a malpractice suit in U.S. District court.

The physician performed a facelift on a 70-year-old patient one day, and a tummy tuck operation on the following day. After the second operation, during which anesthesia was administered through a nasal rather than an oral tube because of facial swelling from the previous facelift surgery, the patient suffered respiratory difficulties and stopped breathing for 11 to 22 minutes, a *Washington Post* story reported. The hospital admitted that a recovery room nurse failed to activate an alarm system on a heart monitoring machine attached to the patient's body following her second operation.

The physician disclaimed any negligence, saying that the brain injury occurred in the recovery room for which the anesthesia department and hospital recovery room personnel are responsible.

The settlement requires the physician to pay $650,000; his assistant, $100,000; the hospital, $800,000; the anesthesiologist, $600,000; and the anesthesiologist's employer, $600,000, to the patient's husband, a Detroit car dealer and real estate developer (*Medical Liability Monitor*, Vol. 9, No. 11, November 26, 1984).

ASBESTOS CLAIMS

Researchers in a study, "Asbestos-Related Injury Claims ... Factors that Explain How the Cases Come Out," also examined litigation expenses. In this particular survey, they found that defendants' legal fees and expenses for all tried claims averaged $125,000, 40 percent of what they paid in total compensation. For all claims that closed before trial began, the average was $33,000 or 60 percent of what they paid in total compensation. Defendants and insurers combined paid $101,000 per closed claim. For every $2.59 paid by defendants and insurers, defense litigation expenses accounted for $.95, plaintiffs' legal expenses for $.64, and the plaintiff received $1 or 39 percent of the $2.59 total (*Medical Liability Monitor*, Vol. 9, No. 11, November 26, 1984).

SLANDER SUIT AGAINST PHYSICIAN

A physician was liable for $125,000 in compensatory and punitive damages for slandering a nurse who worked for him by calling her dishonest, a Texas appellate court ruled.

The physician was an obstetrician-gynecologist at a women's clinic. The nurse's duties included working with patients in the examination room. On October 21, 1980, the nurse saw a notation on the "followup visits" portion of a patient's chart to "repeat rubella." The nurse sent the patient to the lab where blood was drawn for a rubella test.

The nurse later learned from the lab technician that the test already had been repeated. She then told the physician of her mistake, which happened because the later lab slips showing that the test had been repeated were deeper in the file. Later that day the physician looked at the chart and stated that the lab slips were placed in a different order than before.

He demanded to know if the nurse had changed the order of the lab slips and she denied it. He then gave her until 5:00 P.M. that day to find the person who changed the chart. At 5:00 P.M. she had not brought him the person who changed the chart, and the physician gave her until the next day to find the person. The next day, unable to come up with an explanation or a name, she was fired. That evening, the physician called a staff meeting. Referring to the nurse, he informed them that he could not work with anyone who was a liar, who was not trustworthy, and who was not loyal to his practice.

The nurse filed suit for slander and a jury awarded her $65,000 in actual damages and $60,000 in punitive damages. On appeal, the decision was affirmed. There was no evidence that the nurse was dishonest. The physician apparently was a frustrated suitor whom she had rejected. There was some evidence that he became angry when she rejected his affection and assigned her extra work projects. On one occasion after she had turned down an invitation, he performed an abortion in the office late at night and left the room in a particularly offensive state for the nurse to find and clean the next day. That prompted one of the other physicians in the office to call him in and state, "I don't know what your beef is with Rita. Why are you doing this? But I don't want you—this to happen again."

The court said there was evidence of actual malice that justified the punitive damage award [Bolling *v* Baker, 671 S.W. 2d 559 (Tex. Ct. of App., Feb. 22, 1984; rehearing denied, April 9, 1984)] (*The Citation*, Vol. 50, No. 2, November 1, 1984).

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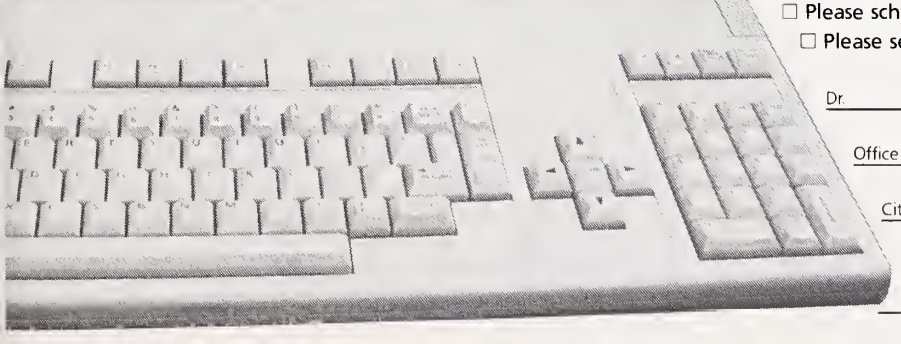
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COME SEE US AT THE N.J. ACADEMY OF FAMILY PHYSICIANS CONVENTION.

MSNJ Peer Review Organization Criteria Committee

A MSNJ committee was charged with reviewing the criteria imposed by the PRO of New Jersey, Inc.

The Board of Trustees and officers of the Medical Society of New Jersey all understand that physicians must be concerned with sick persons, but PRO now is the law of the land. In accordance with the will of the Board of Trustees of MSNJ, President Frank Y. Watson appointed a committee which was charged with several responsibilities:

1) To review carefully the "criteria" promulgated and imposed by the Peer Review Organization of New Jersey, Inc.

2) To delineate deficiencies, aberrations, unreasonable or unattainable standards, and unfair guidelines.

3) To bring these reviews to the attention of the Executive Director, the Medical Directors, and the Board of Trustees of the PRO of New Jersey.

4) To negotiate corrective modification of faulty criteria with the PRO of New Jersey.

All physicians in our state must be aware of the fact that Congress passed legislation (the Peer Review Improvement Act of 1982 and subsequent amendments) and regulations which established Medicare review authorities in each state for all acute care, rehabilitation, psychiatric, and chronic care hospitals nationwide. The Health Care Financing Administration (HCFA) awarded a two-year contract to PRO of New Jersey, Inc. (in excess of $8 million), which replaced the PSROs in New Jersey in October 1984.

The purposes of the PRO review activities are as follows:

- To assure that the care delivered to all Medicare patients in New Jersey acute care hospitals is appropriate and of a quality which meets professionally recognized standards of health care.
- To assess and document the need for diagnostic and/or therapeutic services that best can be provided in an acute care facility.
- To attest that items and services rendered are reasonable, necessary, and consistent with the beneficiary's diagnosis.
- To assure identification and correction of statewide provider and/or practitioner problems.
- To assure the need for admission and continued stay for Medicare patients in New Jersey specialty hospitals.

To accomplish the above, the PRO will conduct a number of reviews:

1) Preadmission certification for elective surgery or medical treatment.

2) Retrospective reviews of procedures (inpatient versus outpatient), length of stay, readmissions, transfers to another hospital, review of selected principal diagnoses, e.g. uncomplicated diabetes, "benign" hypertension, certain cardiac conduction disorders, impacted cerumen.

3) Reviews of patients who discharge themselves against medical advice, patients who die, and those admitted and discharged the same day.

There will be other kinds of "review" so physicians must be familiar with the process. It is critical that we all understand the necessity and procedure for Medicare patients who will be hospitalized for elective surgery or for nonemergency medical conditions.

To date, "criteria" have been distributed for a few elective operations (inguinal hernia repair, cholecystectomy, permanent pacemaker insertion, and single and double coronary vessel bypass) and for a number of medical diagnoses which are not of emergency or urgent character: diabetes, TIA, pneumonia, bronchitis, asthma, hypertension, cardiac dysrhythmias, angina, GI disorders, and cervical-lumbar-sacral sprain or strain. Those who have reviewed the criteria have been satisfied with some, but appalled with others.

For example, the admission criteria for unstable angina includes "coronary angiography unless contraindicated" under "Intensity of Service." Another is the screening criteria for elective herniorrhaphy: "Inguinal/femoral hernia with pain and failure of alternate methods of treatment (over age 75)." This presumably refers to the use of a truss.

We need your help! You must:

- Carefully review all criteria and make pertinent suggestions as to change based on scientific and research data, medical literature, or extensive clinical experience.
- Document carefully any adverse experiences that can be attributed in total or in part to misguided criteria for misguided interpretation of the regulations or criteria for admission, for elective surgery.
- Send this information to the committee promptly.

You can obtain copies of the PRO criteria for hospital admission and elective surgery from the medical direc-

tor or administrator of your hospital. Please speak to the "opinion leaders" (generally your consultants) in your hospital to get specific evaluations in complicated areas. We are not all experts in all medical/surgical matters.

Finally, it goes without saying but can stand repetition that the health and safety of our patients are our primary concern. We recognize that times change, knowledge bases grow, new technology appears, and what was accepted practice a few years ago no longer is acceptable. We all agree that unnecessary operations and needless procedures and hospital admissions should be eliminated. Health care costs continue to be a burden to the nation. The health economists and the politicians are searching for quick fixes out of our dilemma, but we physicians have the primary responsibility for the health of our patients. We never must let down our guard because nonemergent conditions can become urgent or emergency health and life threats in minutes or hours.

Arthur Krosnick, M.D.
Chairman, Ad Hoc Committee on PRO

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- Patients usually awake rested and refreshed[7-9]
- Avoids causing early awakenings or rebound insomnia after discontinuation[2,5,10-12]

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BRAIN DEATH

Policy at Middlesex General-University Hospital

By Jerry M. Belsh, M.D.*

A new hospital policy was developed by the medical board and enacted by the administration of Middlesex General-University Hospital, the primary teaching hospital of UMDNJ-Rutgers Medical School. The policy entitled, "Determination and Certification of Death by Neurological Criteria," represents one institution's response to a problem which increasingly has plagued physicians and hospital administrators in New Jersey and elsewhere over the last 25 years. How do we determine when a brain-damaged patient, maintained by artificial life-support systems, really is dead and how do we deal with the so-called brain-dead patient—medically, legally, and ethically? The purposes of this article are 1) to explain why and how this policy came about; 2) to describe and clarify some of the specific details of the policy; and 3) to comment on the significance of such a policy as it relates to the current medicolegal climate of the state and nation. The exact text of the policy, along with the accompanying checklist are presented in Tables 1 and 2.

Sophisticated life-support systems have enabled physicians to maintain respiration and circulation in patients who have suffered overwhelming brain damage over the past two decades. While some of the patients eventually partially or completely recovered, others developed signs of irreversible cessation of brain functions. Because traditional cardiopulmonary criteria no longer could be applied to such patients the problem of determination of the time of death arose.

To meet this challenge, Harvard Medical School's Ad Hoc Committee on Brain Death published in 1978, a set of criteria for the determination of death which has become familiar as the Harvard criteria.[1] These criteria brought to national attention an unambiguous concept of brain death, including specific criteria for its diagnosis and suggestions regarding withdrawal of life support. Well publicized in both medical and lay publications, these criteria were adopted rapidly by many hospitals across the country, and still are followed in many institutions.

The primary purpose of the Harvard committee was to define a patient with a permanently nonfunctioning brain, irrespective of continued cardiac function, as dead.[1] That definition has remained unaltered, and it now is accepted generally, both in the medical and legal world, that a patient who fulfills the brain death criteria, in fact, already is dead.[2-4] However, some of the specific criteria for the determination of the state of brain death have been under frequent and valid criticism almost from the time the Harvard report was

*From the Department of Neurology, Middlesex General-University Hospital and UMDNJ-Rutgers Medical School, New Brunswick, NJ 08903. Correspondence may be addressed to Dr. Belsh, Department of Neurology, UMDNJ-Rutgers Medical School, Academic Health Science Center, CN 19, New Brunswick, NJ 08903.

TABLE 1

Determination and Certification of Death by Neurological Criteria

Introduction

It is the policy of Middlesex General-University Hospital to preserve and enhance human life and to insure optimal medical care to all patients in accord with current accepted medical standards. Until recent years, the loss of heart functions and cessation of respiration were easily observable and provided the basis for diagnosing death. Now, however, circulation and respiration can be maintained by means of a mechanical ventilator and other medical interventions, despite a loss of all brain functions. Thus, the older criteria of loss of heart function and cessation of respiration cannot be properly evaluated. Under these conditions, death is established if the patient has suffered irreversible cessation of all functions of the entire brain, including the brain stem. The purpose of this policy is to define the criteria and procedures where death can be determined and certified in these circumstances.

Procedure

A checklist for the determination of death by neurological criteria is attached and must be utilized in the evaluation and certification process. These criteria should be used to evaluate patients who remain comatose and apneic despite appropriate therapeutic procedures. The cause of coma must be established and sufficient to account for the loss of brain functions. Reversible conditions, such as drug sedation, metabolic disturbances, hypothermia (below 32.2°C), neuromuscular blockade, and shock, must be searched for and appropriately treated. Physicians should be particularly cautious in applying neurological criteria to determine death in children younger than 5 years.

1. The procedure for determination of death by neurological criteria should be initiated by the patient's attending physician. Two separate clinical examinations must be completed, the second no sooner than six hours after the first. Each examination must be conducted by two physicians who shall be members of the medical staff and shall be licensed to practice medicine by the state of New Jersey. One of these two physicians must be either a staff neurologist, a staff neurosurgeon, or the director of the intensive care unit involved. If any evidence of brain function is elicited during either examination, the patient cannot be certified dead.

2. Toxicology screening is required when sedative drugs, including ethanol, may be implicated by the history or physical examination as a possible cause of the cessation of brain functions and in patients with coma of unknown cause. If exogenous intoxication is found, death may not be declared until the blood and urine concentrations of such agents fall to undetectable or below therapeutic levels at the time of the first examination. If neuromuscular blocking agents have been used, a reversal of their effects must be determined by use of a nerve stimulator.

3. The apneic oxygenation test is a method to determine absolute apnea and is based on findings that apnea cannot be reliably diagnosed unless it occurs in a setting of adequate hypercarbic stimulation of the brain stem. A $PaCO_2$ of 60 mm Hg or more is generally considered an adequate hypercarbic stimulation of the respiratory centers. The test should be performed in the following manner. Prior to the test, the patient is ventilated with 100% oxygen for 30 minutes. During this time, the ventilator is adjusted so that at the start of the test, the $PaCO_2$ is $\geq$ 36 mm Hg and the pH $\leq$ 7.44. The ventilator is then disconnected from the patient, while oxygen at a flow rate of 6 or more liters/min is delivered to the patient via a T-tube. Apneic oxygenation is continued for a period of 10 minutes while the patient is closely monitored. If spontaneous breathing movements occur, or if significant cardiovascular instability intervenes, the test is immediately terminated and the patient reconnected to the ventilator. After 10 minutes of apnea, arterial blood gases are obtained and the patient reconnected to the ventilator. If the $PaCO_2$ is $\geq$ 60mm Hg, the test is positive and the patient is considered to be apneic.

4. A single electroencephalogram (EEG) showing electrocerebral silence (ECS) is required. This EEG should be obtained at some time *after* the first complete clinical examination that shows absence of all brain functions. The EEG is a valuable confirmatory test and provides objective documentation to substantiate the clinical findings. ECS verifies irreversible loss of cerebral hemispheric functions in those patients without drug intoxication, hypothermia or shock. The recording of the EEG must meet the technical standards established by the American EEG Society, as detailed in "Minimal Technical Standards for EEG Recordings in Suspected Cerebral Death," in *Guidelines in EEG 1980*, Atlanta, American Electroencephalographic Society 1980, Section 4, pp 19-24. The interpretation of the EEG must be made by a staff neurologist of the Division of Clinical Neurophysiology and made available in writing before death certification can be completed. If the EEG does not show ECS, the patient cannot be certified dead.

5. There may be circumstances when fulfillment of all the listed criteria is technically difficult or impossible. For example, toxicology screening levels may not be available for a prolonged period of time; it may be impossible to adequately assess certain brain stem reflexes; it may be difficult to determine the neural mediation of certain bizarre, complex limb movements (spinal vs. brain stem); and, in rare instances, it may be impossible to perform the EEG in a technically satisfactory manner. Any of these circumstances may necessitate the use of an additional confirmatory test to document the absence of blood flow to the cerebral hemispheres and brain stem (e.g., cerebral angiography).

Certification

1. After the two clinical examinations and appropriate confirmatory tests have been completed and documented on the checklist, and they have indicated irreversible cessation of all brain functions, then death of that patient is established. Certification of such death should be made on the checklist by the two physicians who carried out the two clinical examinations described in the Procedure Section.

2. Certification of death by neurological criteria is the formal pronouncement of death and the time documented is the time of patient death to be used for all legal matters, including the death certificate issued by the hospital.

3. Certification of death does not require consent, nor is consent to be requested from the next-of-kin. However, the patient's family must be fully informed by the attending physician(s) concerning the determination and certification processes.

4. In cases where the Medical Examiner has jurisdic- →

TABLE 1

Determination and Certification of Death by Neurological Criteria

tion, his permission is not required for the death certification process or termination of medical therapy. However, the Medical Examiner's office shall be immediately notified of the death and the Medical Examiner's authorization must be obtained for removal of organs for transplantation.

5. All hospital policies and procedures concerning matters relevant to any deceased patient (i.e. permission for autopsy, Medical Examiner's jurisdiction, etc.) apply equally to these patients after completion of this certification process and removal of all medical therapy or life-support devices.

6. When transplantation of any of the patient's organs is contemplated, physicians involved in the transplantation process may not be involved in death certification of the potential organ donor.

Withdrawal of Life-Support Systems

1. When a patient is certified dead by neurological criteria, all medical therapy and artificial life-support systems should be withdrawn from the deceased patient by one of the certifying physicians.

2. When organ transplantation is planned, cardiopulmonary and other essential organ support will be continued until the organs of the deceased have been removed. (Refer to Organ Donation Policy in the Nursing Procedure Manual).

issued. Subsequently, newer brain death criteria and guidelines have been developed by individual hospitals and by prestigious, well-organized national committees.[2,3] Criticisms against the Harvard criteria and the appearance of various newer sets of criteria have given rise to confusion concerning the meaning of brain death and the criteria necessary to determine that condition. This has been compounded by the common failure to make the crucial distinction between the vegetative patient in irreversible coma and the already neurologically dead patient.

Confusion concerning the brain death issue may be particularly prevalent in New Jersey because of the famous case of Karen Ann Quinlan and the subsequent establishment of hospital prognosis committees.[5] According to guidelines endorsed by the state attorney general, the New Jersey Board of Medical Examiners, and the state commissioner of health, these committees were set up to consider the prognosis of patients like Karen Ann Quinlan who were felt to have no reasonable possibility of "ever emerging from a comatose condition to a cognitive, sapient state."[5,6]

Karen Ann Quinlan never met the Harvard criteria and was not brain dead. She typifies the many brain-damaged patients who have retained certain brain stem functions but permanently have lost all cognitive functions. Such patients are in the so-called persistent vegetative state. If the prognosis committee concurs with the attending physician that such a patient has no hope of regaining any cognitive, sapient function, and if the patient's family agrees, then the physician may withdraw life-support systems.

In many New Jersey hospitals, however, prognosis committees have been called on to certify brain death and, in addition, to authorize withdrawal of life-support systems in these dead patients. Such use of the prognosis committee is unnecessary and inappropriate. In short, the purpose of the prognosis committee is to help in guiding the care and disposition of hopelessly brain-damaged, but alive, patients. The difficult ethical as well as medical issues involved call for thoughtful review by a full committee. In contrast, patients who already are neurologically dead do not require the deliberations of a committee to confirm that fact.

Another reason for lack of hospital brain death policies is the fear of both physician and administration alike that the unfortunate patient's family or some third party may institute litigation against the physician who would carry such a policy to its logical conclusion, i.e. to terminate the ventilator and other life-support systems. Finally, physicians may fear that a hospital policy regarding brain death is impossible or even illegal without an official brain death statute passed by the state legislature.

It is clear, however, that a policy of benign neglect with regard to brain death certification is not only confusing, but potentially dangerous. Physicians are bewildered by the different sets of published brain death criteria, and perplexed by the lack of direction as to what procedure to follow. The intensive care staff is faced with the demoralizing job of indefinitely caring for patients who, according to the consulting neurologist or neurosurgeon, already are dead. The patient's family often is left, by default, with the decision as to whether to terminate life support; this gives relatives the impression that the final determination of life or death lies in their hands. Finally, hospital administrators must consider who will pay for the continued intensive supportive care of a patient who already has been determined to be dead by neurological criteria.

REMEDY FOR THE CONFUSION

The remedy for such confusion is the establishment of a clear hospital brain death policy based on the best current and accepted levels of medical practice. An opportune time for the development of a hospital policy came with the publication in 1981 of the most recent guidelines concerning brain death: "Report of the Medical Consultants on the Diagnosis of Death to the President's Commission for the Study of Ethical Problems in Medicine and Biomedical and Behavioral Research."[7] The Commission was composed of nationally known physicians, lawyers, clergy, and bioethicists. One issue the President's Commission chose to in-

TABLE 2

A Checklist for Determination of Death by Neurological Criteria

The cause of coma must be established and sufficient to account for the loss of brain functions. Reversible conditions, such as drug sedation, metabolic disturbance, hypothermia (below 32.2°C), neuromuscular blockade, and shock, must be searched for and appropriately treated. Two separate clinical examinations must be completed, the second no sooner than six hours after the first. Each examination must be conducted by two physicians who shall be licensed to practice medicine by the state of New Jersey. A confirmatory electroencephalogram must be performed at some time between the two clinical examinations.

	First Exam	Second Exam
Date		
Time		
Body temperature		
Blood ethanol (if indicated)		
Toxicology studies (if indicated)		

Write Yes or No response to each question

Absence of Cerebral Functions

Is the patient in deep coma, without any spontaneous movements or response to painful stimuli administered over the areas of cranial nerve distribution (e.g., supraorbital pressure), and without decorticate or decerebrate posturing? (Spinal reflexes may be present.)

Absence of Brain Stem Functions

Cranial Nerve Reflexes:

1. Are pupils fixed to light?
2. Are corneal reflexes absent?
3. Are oculocephalic reflexes absent? (no eye movement with head turning)
4. Are oculovestibular reflexes absent? (no eye movement when ears are irrigated with 50 ccs of ice water)
5. Are oropharyngeal responses absent to pharyngeal and endotracheal suctioning?

Apnea:

1. Are spontaneous breathing movements absent during 10 minutes off the respirator using apneic oxygenation? ($PaCO_2$ must be $\geq$ 60 mm Hg at end of test)
2. List $PaCO_2$ at end of apnea test

Confirmatory Test

Date and time a confirmatory electroencephalogram (EEG) was performed which shows electrocerebral silence (ECS) and meets the technical standards of the American EEG Society.

Comments

Certification of Death by Neurological Criteria

Having considered the above findings, we hereby certify the death of:

Date: Time: A.M. P.M.

Physicians' Signatures: M.D. M.D.

Names Printed: M.D. M.D.

vestigate was the determination of death and, for this purpose, they requested the help of a national group of medical consultants.[8] The medical consultants consisted of more than 50 clinicians and investigators, all of whom had contributed to the study of the severely brain-damaged patient. The fields of neurology, neurosurgery, clinical neurophysiology, critical care medicine, pediatric neurology, and legal medicine all were represented. The group reached a consensus on brain death guidelines which was approved by the Commission.

Another significant document which received national attention along with the guidelines of the President's Commission is the Uniform Determination of

Death Act (UDDA). The UDDA is a model statute which would provide legal and medical uniformity across the country in death certification. The statute reads: "An individual who has sustained either 1) irreversible cessation of circulatory and respiratory functions, or 2) irreversible cessation of all functions of the entire brain, including the brain stem, is dead. A determination of death must be made in accordance with accepted medical standards."[7]

The UDDA was proposed by the President's Commission, the National Conference of Commissioners on Uniform State Laws, the American Medical Association, and the American Bar Association, and subsequently was endorsed by the American Academy of Neurology and the American Electroencephalographic Society. Significantly, the model act does not specify medical criteria for determining death, but stresses that whatever criteria are used should be in accordance with accepted medical standards. This function—proposing specific criteria for death in accordance with accepted medical standards—was fulfilled by the President's Commission guidelines.

MIDDLESEX GENERAL-UNIVERSITY HOSPITAL POLICY

In order to establish a brain death policy at Middlesex General-University Hospital the medical board appointed an ad-hoc committee under the chairmanship of the chief of the neurology service. Directors of the medical, surgical, and pediatric intensive care units were represented, as well as the nursing staff and hospital administration. It was thought that the policy would assure that determination and certification of brain death in our hospital would be applied uniformly and would meet "accepted medical standards." Furthermore, it would provide the staff with a clear mechanism for dealing with the brain dead patient.

In addition to a hospital policy, the committee recommended that a hospital reporting form or checklist for brain death should be developed. This checklist, which would be available in all the intensive care units, would be the vehicle for clearly stating the neurological criteria for determination of death. A format similar to that of the Presbyterian-University Hospital of Pittsburgh was developed.[9] If a patient was considered to have brain death, the examining physicians would complete the checklist and place it on the chart as a permanent record.

The hospital checklist serves several purposes: 1) it ensures that each evaluation is done in a standardized manner; 2) it indicates preconditions which must be met prior to initiating the standardized examination procedure; 3) it provides an explicit chart record accessible for verification; and 4) it educates the hospital physicians, nurses, and technicians regarding the criteria of brain death.

The final version of the hospital policy and checklist developed by the ad-hoc committee was reviewed and approved by the hospital legal counsel, the hospital administration, and the medical board.

The policy and checklist have followed closely the recommendations of the President's Commission guidelines.[7] Hospital brain death policies previously published also were helpful in writing our present policy.[10-12] Precise wording of the hospital policy was essential to convey correct meaning and prevent misunderstanding. The title of the policy, "Determination and Certification of Death by Neurological Criteria," immediately conveys the underlying concept of the entire policy—that the patient who eventually meets the criteria laid out will be declared dead. We have followed the President's Commission guidelines in avoiding the term "brain death" either in the title or throughout the policy and checklist. We think this omission makes sense from both a social and moral aspect. For the sake of clarity and consistency, we have used the term "brain death" repeatedly in this article, but we recommend that physicians avoid the use of the term when speaking to the patient's family. To the uneducated, emotionally sensitive, or tragedy-stricken relative, the term "brain death" may suggest two types of human death. While laypersons are familiar with the traditional criteria for cardiopulmonary death, they may fear that their loved one will be declared brain dead earlier in the "dying process" than a similar dying patient—especially if organ donation is contemplated.[13] The policy recognizes death as a singular event rather than a prolonged process.[14] By referring to a patient as meeting certain neurological criteria for death, we reduce the possibility of misunderstandings.

A significant part of the policy is the listing of certain "preconditions" which must be fulfilled prior to the initiation of the protocol. Besides establishing a cause of brain damage sufficient to account for the loss of brain functions, the attending physicians must search for and appropriately treat those reversible causes of coma which may simulate the picture of brain death. Space is provided in the checklist for documenting the patient's body temperature and, if indicated, results of blood ethanol assays and other toxicology studies. Because of the paucity of knowledge concerning the potential for recovery of the young brain-damaged child, we echoed the President's guidelines in urging caution in applying this policy to children younger than five years of age.

Our protocol for determining death by neurological criteria requires a meticulous neurological examination (the clinical examination) performed by two staff physicians licensed by the state of New Jersey. If the clinical examination shows no sign of brain functions, a confirmatory electroencephalogram (EEG) is requested. If the EEG shows electrocerebral silence (ECS), a second clinical examination, identical to the first, is done. The second clinical examination can be performed no sooner than six hours after the first. If it confirms absence of signs of brain functions, then the patient is certified dead on the checklist by the two physicians.

As part of the clinical examination of brain death, the last brain stem reflex requiring testing is the respiratory reflex. While other parts of the clinical examination are familiar to most physicians, the test for apnea deserves further comment. The Harvard criteria required 3 minutes off the ventilator without any res-

piratory effort to determine apnea.[1] The Collaborative Study, conducted by the National Institutes of Health and published in 1977, defined apnea as a state in which the patient makes no effort to override the ventilator for at least 15 minutes.[15] The code of the Royal Colleges of the United Kingdom, published in 1976, was the first to specify the need for an adequate hypercarbic stimulation of the brain stem.[16] It was recognized that absolute apnea can be diagnosed reliably only if it occurs with the patient disconnected from the ventilator for a sufficient time to ensure a $PaCO_2$ level capable of stimulating any respiratory neurons that still may be alive in the brain stem.

An obvious problem is how to maintain adequate oxygenation of the blood while the $PaCO_2$ level is rising in a disconnected, nonbreathing patient; that problem has been solved by the technique of apneic oxygenation or apneic oxygen diffusion.

The technique involves preoxygenating the patient for some period prior to disconnection, thus allowing the lungs to fill with pure oxygen. Assuming no serious pulmonary disease, such preoxygenation, along with a passive flow of oxygen during disconnection, should provide sufficient alveolar oxygen for 10 to 15 minutes of apnea without hypoxemia or damage to the heart or other body organs. Based on studies by Shafer, Caronna, and Pitts at the San Francisco General Hospital, our policy requires a 10-minute disconnection, during which the $PaCO_2$ must rise to a level of 60 mm Hg or more.[17,18] To assure that the $PaCO_2$ reaches at least 60 at the end of 10 minutes, the patient must not be hypocapnic at the start of disconnection. Therefore, we have required a starting $PaCO_2$ of 36 mm Hg or more. Extensive experience with the apnea test at our institution has shown it to be a safe, easily performed, and extremely sensitive test of brain stem function.

The policy requires a second clinical examination at the end of a minimal observation period of 6 hours. The purposes of such retesting are to ensure that there has been no observer error and that there has been no change in clinical signs.[19] In short, it verifies that cessation of brain functions is irreversible. The duration of observation periods prior to retesting has varied from 30 minutes in the Collaborative Study to the familiar 24-hour hiatus of the Harvard criteria.[1,15] The 6-hour minimum observation period in our policy is based on the President's Commission guidelines. It is quite clear from the extensive literature on the comatose patient that no patient who properly has met the preconditions and clinical criteria of brain death has ever regained brain function after a 6-hour observation period.

The requirements of a confirmatory EEG at some time between the two clinical examinations further bolsters the reliability of the brain death policy. The need for an EEG in the determination of brain death has been very controversial, and the President's Commission guidelines reflect this controversy by calling a confirmatory EEG "desirable when objective documentation is needed to substantiate the clinical findings."[7] The EEG is not essential in every case, or even in most cases, where the cause of coma is known beyond a doubt to be irreversible by a meticulous neurological examination. However, not all cases are so clear-cut; human fallibility always exists, so the public and the courts often like to have the diagnosis of a qualified physician corroborated by a state-of-the-art biomedical test.

Several cogent arguments favor using the EEG as a confirmatory test in the determination of brain death. It is known that an EEG showing electrocerebral silence (ECS) verifies irreversible loss of cerebral hemispheric functions in the absence of drug intoxication, hypothermia, or shock.[15,20,21] The EEG provides a standardized, noninvasive confirmation of the clinical examination, and provides information about brain cell function which is not obtainable with other methods of examination. It gives objective reassurance concerning the hopeless state for both relatives and hospital staff. Furthermore, the EEG provides documented evidence of brain death at a time of general public anxiety about medical management of the comatose patient. This anxiety has been heightened by media reports which publicize chilling stories of not-so-dead patients whose life support was discontinued too soon, and by sensational tales of the declared-dead subsequently recovering and walking out of the hospital. An ECS tracing should be required only if an EEG department of adequate quality is available and the technical standards established by the American EEG Society can be met.[22] No EEG may be better than an unsatisfactory EEG.[23]

Certification of death is made at the bottom of the checklist once irreversible cessation of all brain functions is established, i.e. upon completion of the second clinical examination. Here the policy takes a definitive step which is a logical outgrowth of our previous discussion. It regards the certified patient as medically and legally dead, and directs the attending physician to act accordingly. The patient no longer is "comatose" or "hopelessly brain-damaged"; rather, he or she is dead, with a heart and certain other organs which may continue to function for days or sometimes weeks if ventilation and circulation are maintained. Time of death is the time certified by the two physicians on the checklist. If organ transplantation is not planned, the certifying physicians then are directed by the policy to withdraw all medical therapy and artificial life-support systems from the deceased patient.

As with the pronouncement of death by traditional cardiopulmonary criteria, pronouncement of death by neurological criteria does not require consent by the patient's family. Certainly the family should be fully informed concerning the processes and meaning of the brain death protocol. However, to request family consent for death certification or life-support withdrawal is to suggest to them that they and not the doctors are to make the final decision whether to "prolong life" or "allow death." Such a suggestion is false and misleading as the patient already has been determined to be dead.[24] The close relative asked to acquiesce or consent to life-support withdrawal is forced into an emotional and ethical dilemma; a final consent to withdrawal

often is followed by a deep sense of guilt that he or she has contributed in some manner to the death of a loved one. The determination of death is and always has been a medical decision. The distraught family looks to the attending physician for medical authority and firm decision making. A similar opinion was expressed over 15 years ago by the Ad Hoc Committee of the Harvard Medical School, which stated "It is unsound and undesirable to force the family to make the decision [to declare death and to turn off the respirator]."[1]

At present there is no legal statute in the state of New Jersey recognizing the validity of neurological criteria for death. Brain death statutes have been enacted in about two-thirds of the states, including Pennsylvania, which enacted in February 1983 a new law identical to the Universal Determination of Death Act.[8,25] Certainly, a specific New Jersey state law in this regard would be helpful, and we welcome the passage of the brain death bill currently before the New Jersey State Assembly.[26] However, the absence of such a statute does not prevent an individual hospital from formulating its own policy or guidelines, so long as it defines death in keeping with accepted medical standards.[27] John F. Horty, in a particularly pertinent section of his treatise on hospital law, discusses the legal concerns of the hospitals and physicians in states which have no judicial or statutory law pertaining to brain death:

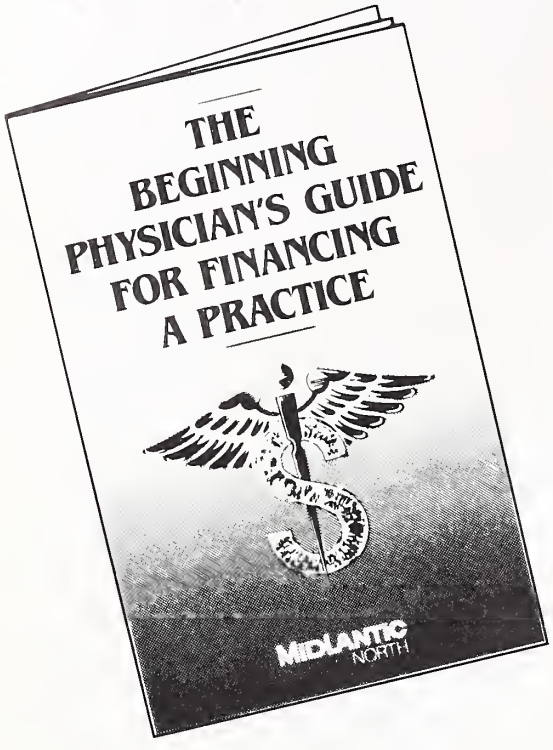
> Many hospitals in states without any judicial or statutory law concerning brain death have been using the alternate [neurological] standards of death for a number of years. This is in accord with ordinary medical practice and hospitals that follow a well-written policy need not fear potential liability. No court yet has refused to recognize such a standard, and indeed several have questioned as to whether their seal of approval is necessary in what they consider to be a medical determination.
>
> As mentioned previously, there is no duty to keep a dead patient on life-support machines. As long as the hospital and doctors have not been negligent in declaring a patient dead—that is, as long as a hospital has followed ordinary medical procedures and standards, there is no reason to fear liability. Since brain death is now recognized under ordinary medical standards, the hospitals and doctors have met the necessary requirements to avoid liability if they have acted properly in determining whether a particular person is brain dead.[10]

Our hospital policy, based on the recommended criteria for death laid out in the President's Commission guidelines, certainly would meet not only "ordinary" medical standards, but the highest medical standards in the country. Hence, adhering to such a hospital policy, along with clear and open documentation of the brain death examination on a checklist, is the best safeguard a physician has against suspicion of error.[28]

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Putting Benzodiazepine Hypnotics into Proper Therapeutic Perspective

Norman Sussman, M.D., New York, NY*

Three benzodiazepine derivatives are approved for use as hypnotics: flurazepam, temazepam, and triazolam. Confusion and controversy surround the use of benzodiazepines, particularly as tranquilizers or sleeping pills.

Benzodiazepines have become the preferred pharmacologic agents in the treatment of insomnia. These drugs have achieved widespread acceptance because they are less lethal when taken in overdose, are more likely to maintain clinical efficacy with regular use, and are less likely to alter hepatic function than the barbiturates—the class of drugs which was supplanted by the benzodiazepines.

Three benzodiazepine derivatives are approved for use in the symptomatic treatment of insomnia: flurazepam (Dalmane®), temazepam (Restoril®), and triazolam (Halcion®). Despite a large body of literature about the efficacy and side effects associated with these drugs, this information is difficult to interpret, even for those with extensive knowledge of polysomnography and pharmacokinetics. It is even more difficult to derive conclusions that can be generalized to clinical practice. Considering the widespread use of sleeping pills—4 percent of the population uses a prescription drug at least once each year[1]—it always is timely to examine issues associated with their use.

PRINCIPLES OF CLINICAL USE

Hypnotic drugs are prescribed in response to a complaint of insomnia or in anticipation of sleep difficulties. The latter is typified by hospitalization, where noise and situational anxiety frequently interfere with sleep. There are no universally accepted guidelines for hypnotic drug use, but several general principles are best followed. It is advisable to conduct a detailed interview in which the duration of the symptom (e.g. days, weeks, months), associated life events (e.g. stress, loss, change), pattern (e.g. intermittent, chronic), and quality (e.g. sleep onset, middle of the night awakening, early morning awakening) are determined.

It also is advisable to ask whether or not the patient experiences daytime sleepiness as a result of the reported sleep loss. In the absence of daytime complaints, a diagnosis of insomnia should not be made. Instead, the possibility that the patient has a short sleep need should be explored. Some persons are able to function adequately with less than four hours of sleep.[2]

Before prescribing a benzodiazepine for insomnia, the underlying causes of these symptoms should be investigated; disease, side effects of other drugs, and dietary factors need to be considered. Since coffee and tea antagonize the effects of benzodiazepines, patients should be advised to omit or minimize the consumption of these beverages. Stopping their use may obviate the need for medication. Similarly, stimulant medication may interfere with normal sleep.

*This paper was presented at the MSNJ Annual Meeting, May 5, 1984, in Atlantic City. Dr. Sussman is Clinical Assistant Professor, Department of Psychiatry, New York University School of Medicine. Correspondence may be addressed to Dr. Sussman, Suite 204, 20 East 68th Street, New York, NY 10021.

The goal of benzodiazepine hypnotic therapy is to improve the quality and/or duration of sleep with a minimum of daytime side effects, such as impaired daytime psychomotor performance and increased somnolence. If hypnotics are prescribed, the patient's daytime mood, cognition, and coordination should be monitored.

It is a central dogma of recommended prescribing practice that hypnotics be used only intermittently and for brief periods. Nevertheless, it repeatedly has been found that these drugs frequently are prescribed for extended periods. It is best not to prescribe more that a two-week supply of hypnotic medication at any one time.

Prescribed daily dosage never should exceed recommended levels. Failure to respond to maximal suggested doses should suggest further investigation and possible treatment of depression or psychosis. Using more than a recommended dosage inevitably leads to severe residual effects.

Benzodiazepines are best withheld from patients with a history of drug or alcohol abuse. Although these drugs generally are not used recreationally, patients prone to substance abuse may become habituated to benzodiazepines or use these drugs in excess. In addition, the safety of these drugs in relation to overdose only applies to their use alone. In combination with other central nervous system depressants, these drugs can be dangerous.

A second important contraindication to benzodiazepine use is the presence of respiratory disease, specifically sleep apnea. Patients with sleep apnea may experience life-threatening exacerbations of their disorder when given sedative drugs. Diagnosis of sleep apnea should be confirmed by sleep laboratory studies.

Special caution should be used when prescribing hypnotics to elderly patients who tend to clear drugs more slowly and are more sensitive to the development of both cognitive and motor impairment.

When pharmacotherapy is indicated, benzodiazepine hypnotics are the drugs of choice.

PHARMACOKINETIC FACTORS

At higher doses, all currently marketed benzodiazepines are equally effective as sleep enhancing agents.[3] Similarly, at lower doses they reduce anticipatory or generalized anxiety.[4] That some compounds are marketed as hypnotic drugs, while others are approved as antianxiety agents, reflects both marketing/research decisions on the part of the manufacturer and pharmacokinetic profiles of the individual drugs.[5] Important kinetic features of hypnotics include absorption rate, pathway of metabolism, and speed of elimination.

Absorption. Because the rate of benzodiazepine absorption is the major determinant of the onset of drug effect and because many persons use hypnotic agents to manage sleep onset difficulties, speed of absorption would be expected to be a critical factor in hypnotic efficacy. All benzodiazepines are absorbed with comparative speed, although subtle differences exist between drugs and between individuals. Using a benzodiazepine after having a meal tends to delay but not diminish absorption.

Pathway of Biotransformation. The metabolism of benzodiazepines involves two major pathways. The metabolic pathway of one group of benzodiazepines involves hepatic microsomal oxidation. Those in a second group are metabolized by glucuronide conjugation. Oxidized drugs are more susceptible to prolongation of elimination rate by age, liver disease, and concurrent use of drugs that interfere with hepatic microsomes.[6] The most significant potential benzodiazepine-drug interaction involves cimetidine mainly because it is among the most widely used of all drugs.[7]

It is important to note that the benzodiazepines are affected by liver disease but do not alter liver metabolism, in contrast to barbiturates, which induce hepatic enzymes and hence require higher doses to achieve the same clinical effect.

Elimination Half-Life. The three currently available benzodiazepine hypnotics represent a different point along the spectrum of elimination half-life—the relative rate of drug excretion. In a very general sense, elimination half-life corrolates with the duration of pharmacological effect, but these terms are far from synonymous. Many variables may intervene, so that under some circumstances a drug with a short elimination half-life may have longer duration of activity than more slowly eliminated compounds. Examples of such circumstances include the concurrent use of other medications, advanced age, and use of excessive doses of a hypnotic compound.

In discussions of benzodiazepines, no pharmacokinetic term is used more often—and misunderstood more frequently—than "half-life." Elimination half-life—a mathematically derived number—is used to described the relative rate of drug excretion. It is not synonymous with duration of pharmacologic effect. Many drugs with a long elimination half-life have a short duration of activity when used in single doses, mainly because of their large volume of distribution.[8]

Elimination half-life therefore is understood best as a property that determines whether a drug will accumulate with repeated dosage. Longer half-life drugs tend to accumulate, while shorter half-life drugs do not.

BENZODIAZEPINE HYPNOTICS

Each of the currently marketed benzodiazepine hypnotics differs markedly from the others in its pharmacokinetic properties. As a result, each drug produces a unique profile of clinical effects and side effects.[6]

Flurazepam. Flurazepam was the first benzodiazepine to be approved for use specifically in the treatment of insomnia. At the time of its introduction it offered several advantages over the barbiturate hypnotics. These were the lower risk of distorting sleep architecture, specifically, suppressing REM sleep, increased safety in overdose, and the lack of hepatic enzyme induction. Nevertheless, flurazepam has active metabolites with an elimination half-life of over 100 hours, which seems to be incompatible with the ideal profile of a hypnotic agent.[9] Indeed, the availability of shorter-acting compounds has revealed several problems associated with flurazepam in its role as a hypnotic drug. For example, as compared to triazolam and temazepam, flurazepam actually decreases daytime

alertness, and impairs psychomotor performance. Although daytime sedation may diminish slightly after three weeks of nightly use, decreased daytime performance remains.[10,11]

Some patients experience increased difficulty falling asleep (rebound insomnia) during the second week following flurazepam discontinuation.[11] This delayed rebound phenomenon is the result of the slow washout of flurazepam metabolites, a consequence of their long elimination half-lives. An additional problem with flurazepam's long half-life is the increased risk of interactions with other drugs. The elimination rate of flurazepam is prolonged in elderly males.[12,13]

The starting dose of flurazepam is 15 mg; maximal dose is 30 mg.

Temazepam. Temazepam has an intermediate elimination half-life of 9.5 to 12.5 hours.[14] This relatively short half-life minimizes the risk of residual sedation following single-night use of the drug, and reduces the likelihood of drug accumulation following nightly use.

Temazepam is the only one of the approved benzodiazepine hypnotics that is metabolized by conjugation rather than oxidation. As a result its rate of biotransformation is not affected by hepatic disease, by drugs that inhibit oxidation, or by advanced age. However, for reasons that are not clear, the elimination half-life of temazepam is prolonged in some elderly females, but not in males.[15]

One problem that has been reported with temazepam use is its variable rate of absorption. Apparently the drug is absorbed rapidly in some patients and absorbed slowly in others.[15] As a result, some patients may experience peak drug concentrations several hours after drug ingestion, resulting in increased next-day sedation. A sensible approach to the use of this drug is for the physician to consider the possibility that absorption rates may vary from patient to patient. It may be useful to give temazepam one to two hours before bedtime to accommodate a slower absorption. It is possible to see slower absorption as an advantage, since it avoids a "knock-out" effect, allows a more natural onset of sleep, and reduces the potential for abuse.[16] The combination of slower absorption and intermediate half-life makes temazepam best suited for patients who anticipate sleep difficulties and take the medication at or before bedtime. A person who uses temazepam as a last resort early in the morning will most likely experience significant next-day sedation.

The recommended starting dose of temazepam is 15 mg; maximal dose is 30 mg.

Triazolam. Triazolam has an ultra-short elimination half-life of 1.5 to 5.0 hours.[17] This short half-life makes it highly suitable for hypnotic use since it provides improved sleep efficacy without impairment of daytime alertness.[18] Indeed, in some chronic insomniacs, triazolam clearly improves both daytime alertness and psychomotor performance.[11,19] By comparison, longer-acting hypnotics increase daytime sleepiness and reduce performance. An additional advantage of triazolam's very short half-life is that it provides little opportunity for adverse interactions with other drugs.[20]

Because triazolam is biotransformed via hepatic oxidation, it would be expected that drugs and liver disease would increase its elimination half-life. However, the rapid clearance of triazolam appears to preclude significant interference in its elimination. Instead, there may be an intensification of drug effect as a result of increased plasma levels,[21] therefore, reduced doses should be used in these cases. There is no significant age-related prolongation of triazolam elimination time,[22] but there is increased intensity of drug effect, so the lowest possible doses (0.125 mg) should be used.

The recommended starting dose for adults up to age 60 is 0.25 mg; maximal dose is 0.5 mg. For older subjects or debilitated patients, a dose of 0.125 mg is recommended.

Drugs with Other Primary Indications. Some clinicians prescribe medications with other primary indications and sedative properties as alternatives to benzodiazepines. Such intentional use of side effects results from the fear of abuse, addiction, or adverse publicity that has surrounded benzodiazepines. Tricyclic antidepressants carry the risk of orthostatic hypotension, cardiac arrythmia, and urinary difficulties. Phenothiazines and other antipsychotic agents are known to cause anticholinergic side effects similar to those of the tricyclic antidepressants, and in addition produce movement disorders such as parkinsonism, akathisia, and chronic tardive dyskinesia.

Benzodiazepines have a useful role to play in the short-term management of sleep problems.

Interchangeable Use of Anxiolytic and Hypnotic Benzodiazepines. Some physicians have adopted the practice of using benzodiazepines that are marketed as antianxiety drugs as hypnotic agents. Given the similarities between available compounds, this practice is acceptable.

This view, that approved indications are meaningless and that the intermediate half-life drugs (alprazolam, oxazepam, lorazepam, and temazepam) can be used interchangeably as both anxiolytics and hypnotics, certainly cannot be challenged on pharmacological grounds. Indeed, it has been suggested that drugs with an intermediate half-life be termed "hypno-anxiolytics."

Nevertheless, there are valid reasons to adhere to conventional indications. One is that there is an extensive body of research published on the approved indication, permitting the interested practitioner to explore more fully the subtle effects of a drug for that condition. Second, identifying a drug as either a "sleeping pill" or tranquilizer discourages all but the more medically sophisticated patient from taking it upon himself to use the drug ad lib. In other words, a patient being given triazolam or temazepam is unlikely to resort to these drugs when experiencing an anxiety producing situation.

ADVERSE EFFECTS

In addition to long-standing concerns about residual effects, abuse, and drug interactions, two other potential adverse effects have been identified as being associated with benzodiazepine hypnotic use. These are rebound insomnia and anterograde amnesia.

Rebound Insomnia. Rebound insomnia is defined as the marked worsening of sleep difficulties following abrupt withdrawal of hypnotic drugs. Although rebound insomnia is discussed widely and has been documented in sleep laboratory studies, the incidence and the clinical significance of rebound insomnia still are very much in question. Triazolam has been the most frequently cited cause of rebound insomnia, but this phenomenon has been reported with other drugs as well. These reports include temazepam,[23] lorazepam,[24] and flurazepam.[25] These drugs represent a spectrum of drug elimination half-lives, which lends some doubt to the theory that rebound is a phenomenon associated with only shorter half-life compounds. All of these reports, of course, represent sleep laboratory studies using EEG as the objective measurement of sleep. Thus, "decreased sleep" or "increased wakefulness" are defined primarily by EEG recordings, not subjectively by patients. Ultimately the most important question with regard to "rebound" is whether it has any clinical significance at all. Other important questions which must be addressed through additional research include the incidence of rebound (both objectively and subjectively); the underlying etiology of insomnia in patients for whom rebound does occur; does rebound occur in normal (i.e. noninsomnia) subjects? and does it occur equally in situational versus chronic insomnia?

It is evident that much remains to be learned about rebound insomnia. Still, patients may experience disturbed sleep on the first night following drug discontinuance. If it turns out that rebound is a subjectively prevalent phenomenon, it probably is an advantage that it occurs soon after drug discontinuance of short half-life drug rather than after seven to eight days with the longer-acting products. In this way the patient clearly can associate a temporary change in sleep with discontinuance of his sleeping medication and is less likely to assume that it represents a return of symptomatology.

Anterograde Amnesia. Anterograde amnesia has been reported for benzodiazepines in clinical trials and from drug experience. The duration of this effect generally is limited to a period of minutes to hours following drug ingestion. There is some evidence that the effect is dose related, but this has not been shown conclusively. This side effect of the benzodiazepine group of drugs has been used to advantage in surgical situations with intravenous benzodiazepines such as diazepam.

The question of amnesia effects warrants consideration when benzodiazepines are used in older patients since memory impairment may be considered to be the result of aging rather than drug induced.

CONCLUSIONS

Benzodiazepines have a useful role to play in the short-term management of sleep difficulties. Drugs with more rapid rates of elimination should be considered as first choice since they are less likely to produce residual sedation and deficits in cognitive and psychomotor performance. It is advisable to use the lowest effective dose for the shortest possible time. Some individuals, who use hypnotics over a period of months or years should be encouraged to take the drugs intermittently—every third night, or when a good night's sleep is imperative.[26]

Long elimination half-life drugs may have a limited role in the treatment of insomnia in patients who experience daytime anxiety. However, drug treatment alone generally is not satisfactory for the management of insomnia or anxiety. A combined approach is more effective.

As clinical experience with the benzodiazepine drugs increases, there is a growing awareness that many long-held assumptions and practices need to be revised. One example of such change is the documentation of a distinct benzodiazepine withdrawal syndrome, with subtle alterations of mood and perception.[27]

Another recent finding calls into question the practice of writing routine orders for hypnotic medication when patients are admitted to the hospital. At least one study has found that patients who are given sleeping pills do not rate the quality of their sleep as being any better than those who do not receive medication. Moreover, they complain of as many awakenings during the night as those who do not receive a hypnotic.[28] Since about 4 percent of those who are first exposed to hypnotic drugs continue to use these drugs after discharge, when the acute situation which prompted the hypnotic order has passed,[29] a more conservative approach to inpatient hypnotic prescribing may be warranted.

In considering the significance of rebound insomnia, an economic conceptualization of the use of sleeping pills may help to provide a clinical perspective. Since insomnia is defined as a symptom or disorder in which there is a deficiency in the amount or quality of noctural sleep, hypnotic-induced sleep, becomes, in effect, borrowed sleep.[30] For the patient, it may be desirable to fall asleep quickly, have no or only short arousals, and wake up feeling refreshed and efficient on a given morning[31] while knowing that there may be some increased difficulty in sleeping following drug discontinuation. At a later time, a good night's sleep may not be as crucial. Hypnotics also can be conceptualized as sleep insurance.[32] Even though there may be a price to pay for the use of these drugs, in the form of rebound, there is some comfort and less worry knowing that the suffering associated with a sleepless night is not inevitable during times of stress, jet lag, or other situational disruption. However, these drugs should not be used as nonspecific sedation in solving psychosocial predicaments.[33,34] The ultimate value of benzodiazepine hypnotics largely is determined by the degree to which both the patient and physician use them knowledgeably and judiciously.

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Visualization of the Gallbladder in a Case of Acute Cholecystitis by Hepatobiliary Imaging

Abraham A. Ghiatas, M.D., Mohan Makhija, M.D., David J. Averbach, M.D., Long Branch*

Hepatobiliary imaging of acute cholecystitis using Tc-99m labeled iminodiacetic acid (IDA) is 98 percent sensitive and 100 percent specific. We report a patient with acute hemorrhagic and gangrenous calculus cholecystitis with patent cystic and common bile ducts by the scintigraphic study. A false negative study may be seen in acalculus cholecystitis or where temporary relief of obstructed cystic duct by stone occurs.

Hepatobiliary imaging in the diagnosis of acute cholecystitis, using Tc-99m labeled iminodiacetic acid (IDA) compounds, is a safe and very accurate method (98 percent accuracy and 100 percent specificity).[1,5] Visualization of the gallbladder virtually excludes the possibility of acute cholecystitis; the only exception is acalculus cholecystitis where false negative results may occur.[4,6] We report visualization of the gallbladder in a patient with calculus cholecystitis proved at surgery.

CASE REPORT

A 21-year-old Hispanic female was admitted to Monmouth Medical Center because of right upper quadrant pain of one-week duration. Past medical history was unremarkable and the patient was not on any medication. Physical examination revealed tenderness of the abdomen, but no fever.

The laboratory studies revealed slightly elevated LDH at 303 U/L (normal values 123 to 255 U/L). This was the only abnormality.

Ultrasound of the gallbladder revealed evidence of sludge but no evidence of stones (Figure 1).

Hepatobiliary imaging was performed sequentially up to one hour following the intravenous administration of 185 MBQ of Tc-99m DISIDA which revealed patent cystic and common bile ducts. Some delay in the entry of the tracer from the hepatobiliary tree into the bowel loops was thought to be related to an ileus (Figure 2).

The next day, the patient was taken to surgery with a preoperative diagnosis of acute abdomen and cholecystectomy was performed. The operative findings included gangrenous cholecystitis as well as gangrenous cystic duct. A calculus was found at the neck of the gallbladder, presumably initiating the event of the gangrenous condition (Figure 3). A diagnosis of acute hemorrhagic and gangrenous cholecystitis and cholelithiasis was made.

DISCUSSION

Acute cholecystitis represents a serious disease with life-threatening potential if untreated. Acute cholecystitis almost always is the result of a calculus impacted in the neck of the gallbladder at the origin of the common duct. Surgery related to cholelithiasis and/or its complications involves more than 500,000 procedures per year.[4]

The early diagnosis and treatment of this condition decreases the morbidity and mortality.

In this respect, gallbladder scintigraphy using IDA

*From Monmouth Medical Center where Drs. Ghiatas and Makhija are from the Department of Diagnostic Radiology and Dr. Averbach is from the Department of Surgery. Correspondence may be addressed to Dr. Ghiatas, Monmouth Medical Center, Department of Radiology, 300 Second Avenue, Long Branch, NJ 07740.

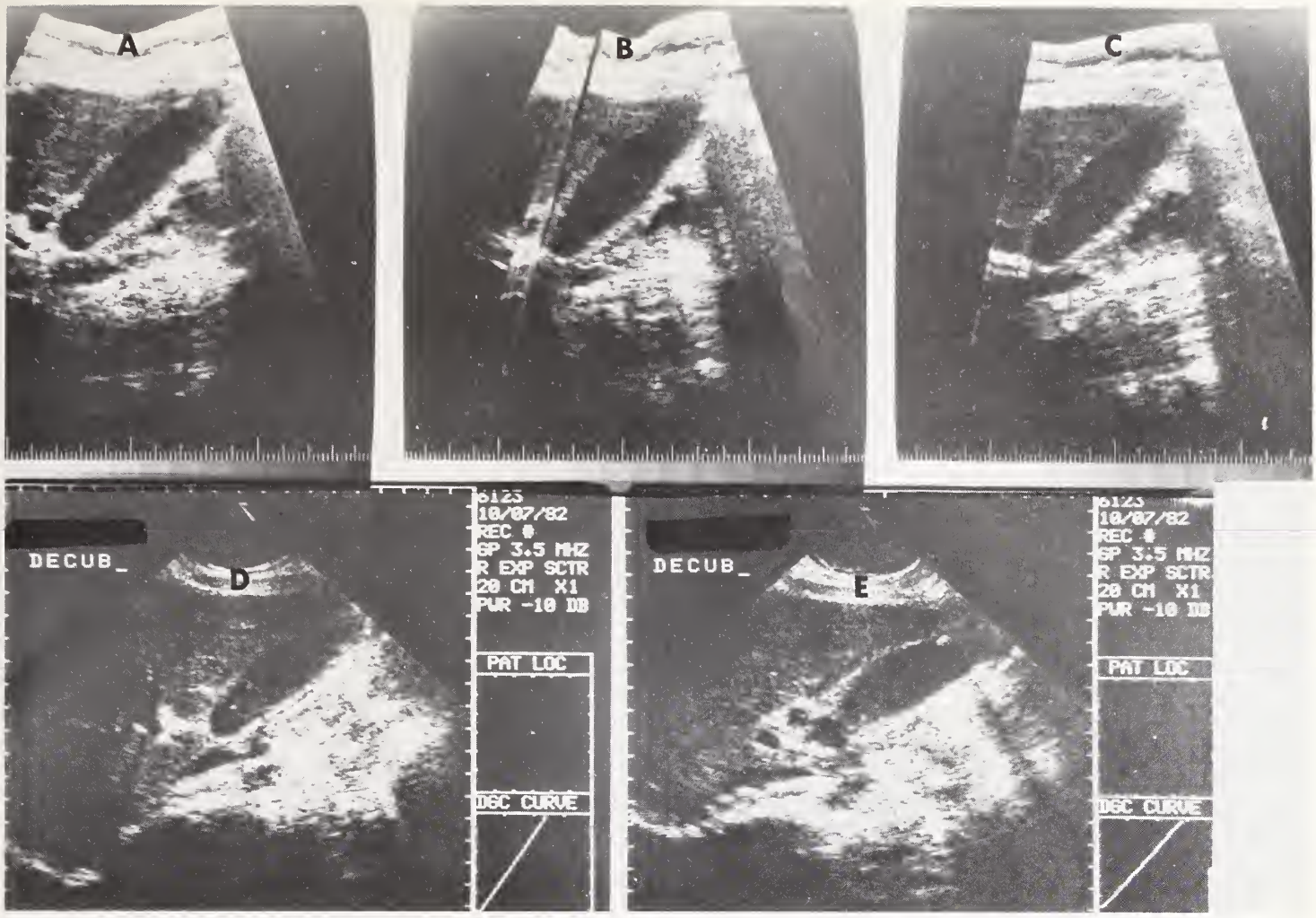


Figure 1—Ultrasound of the gallbladder. Longitudinal (A, B, and C) and decubitus (D, E) scans revealed that there was evidence of sludge but that there was no evidence of stones for this patient.



Figure 2—Hepatobiliary scan. 15 minutes, 30 minutes, 45 minutes, and 1 hour images revealed patent cystic and common bile ducts.

compounds has proved to be an accurate, safe, and rapid method of diagnosis.

The hepatocytes extract the Tc-99m IDA compounds and excrete them to the duodenum by the common bile duct or concentrate into the gallbladder and then pass (after gallbladder contraction) into the duodenum via the common bile duct. Under normal circumstances the gallbladder-common bile duct and duodenum promptly will be visualized after the administration of Tc-99m IDA compounds. If there is delayed visualization of the gallbladder, chronic cholecystitis is likely. If there is no visualization of the gallbladder, cystic duct observation is likely.[3]

However, normal hepatobiliary scintigraphy may be seen in the event of serious gallbladder disease such as acalculus cholecystitis or cholelithiasis without obstruction of the cystic duct since gallbladder mucosal function is not required for the concentration of the hepatobiliary imaging agent.

In our case, visualization of the gallbladder may have resulted from temporary relief of the obstruction of the cystic duct which permitted the hepatobiliary imaging agent to enter and visualize the gallbladder.

SUMMARY

Scintigraphy of the gallbladder using Tc-99m IDA compounds is a safe and accurate method to diagnose acute cholecystitis. In a small percentage, 2 to 5 per-



Figure 3—The fundus of the gallbladder (arrow) is seen and appears to be gangrenous.

cent it may be misleading, by visualization of the gallbladder, in cases such as acalculus cholecystitis or temporary relief of obstructed cystic duct by stone.[2,3]

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CONTRAINDICATIONS: SORBITRATE is contraindicated in patients who have shown purported hypersensitivity or idiosyncrasy to it or other nitrates or nitrites. Epinephrine and related compounds are ineffective in reversing the severe hypotensive events associated with overdose and are contraindicated in this situation.

WARNINGS: The benefits of SORBITRATE during the early days of an acute myocardial infarction have not been established. If one elects to use organic nitrates in early infarction, hemodynamic monitoring and frequent clinical assessment should be used because of the potential deleterious effects of hypotension.

PRECAUTIONS: General: Severe hypotensive response, particularly with upright posture, may occur with even small doses of SORBITRATE. The drug should therefore be used with caution in subjects who may have blood volume depletion from diuretic therapy or in subjects who have low systolic blood pressure (eg, below 90 mmHg). Paradoxical bradycardia and increased angina pectoris may accompany nitrate-induced hypotension. Nitrate therapy may aggravate the angina caused by hypertrophic cardiomyopathy.

Marked symptomatic, orthostatic hypotension has been reported when calcium channel blockers and organic nitrates were used in combination. Dose adjustment of either class of agents may be necessary.

Tolerance to this drug and cross-tolerance to other nitrates and nitrites may occur. Tolerance to the vascular and antianginal effects of isosorbide dinitrate or nitroglycerin has been demonstrated in clinical trials, experience through occupational exposure, and in isolated tissue experiments in the laboratory. The importance of tolerance to the appropriate use of isosorbide dinitrate in the management of patients with angina pectoris has not been determined. However, one clinical trial using treadmill exercise tolerance (as an end point) found an 8-hour duration of action of oral isosorbide dinitrate following the first dose (after a 2-week placebo washout) and only a 2-hour duration of effect of the same dose after 1 week of repetitive dosing at conventional dosing intervals. On the other hand, several trials have been able to differentiate isosorbide dinitrate from placebo after 4 weeks of therapy and, in open trials, an effect seems detectable for as long as several months.

Tolerance clearly occurs in industrial workers continuously exposed to nitroglycerin. Moreover, physical dependence also occurs since chest pain, acute myocardial infarction, and even sudden death have occurred during temporary withdrawal of nitroglycerin from the workers. In clinical trials in angina patients, there are reports of anginal attacks being more easily provoked and of rebound in the hemodynamic effects soon after nitrate withdrawal. The relative importance of these observations to the routine, clinical use of isosorbide dinitrate is not known. However, it seems prudent to gradually withdraw patients from isosorbide dinitrate when the therapy is being terminated, rather than stopping the drug abruptly.

Information for Patients: Headache may occur during initial therapy with SORBITRATE. Headache is usually relieved by the use of standard headache remedies or by lowering the dose and tends to disappear after the first week or two of use.

Drug Interactions: Alcohol may enhance any marked sensitivity to the hypotensive effect of nitrates.

Isosorbide dinitrate acts directly on vascular smooth muscle; therefore, any other agent that depends on vascular smooth muscle as the final common path can be expected to have decreased or increased effect depending on the agent.

Carcinogenesis, Mutagenesis, Impairment of Fertility: No long-term studies in animals have been performed to evaluate the carcinogenic potential of this drug. A modified two-litter reproduction study in rats fed isosorbide dinitrate at 25 or 100 mg/kg/day did not reveal any effects on fertility or gestation or any remarkable gross pathology in any parent or offspring fed isosorbide dinitrate as compared with rats fed a basal-controlled diet.

Pregnancy Category C: Isosorbide dinitrate has been shown to cause a dose-related increase in embryotoxicity (increase in mummified pups) in rabbits at oral doses 35 and 150 times the maximum recommended human daily dose. There are no adequate and well-controlled studies in pregnant women. SORBITRATE should be used during pregnancy only if the potential benefit justifies the potential risk to the fetus.

Nursing Mothers: It is not known whether this drug is excreted in human milk. Because many drugs are excreted in human milk, caution should be exercised when SORBITRATE is administered to a nursing woman.

Pediatric Use: The safety and effectiveness of SORBITRATE in children has not been established.

ADVERSE REACTIONS: Adverse reactions, particularly headache and hypotension, are dose-related. In clinical trials at various doses, the following have been observed.

Headache is the most common (reported incidence varies widely, apparently being dose-related, with an average occurrence of about 25%) adverse reaction and may be severe and persistent. Cutaneous vasodilation with flushing may occur. Transient episodes of dizziness and weakness, as well as other signs of cerebral ischemia associated with postural hypotension, may occasionally develop (the incidence of reported symptomatic hypotension ranges from 2% to 36%). An occasional individual will exhibit marked sensitivity to the hypotensive effects of nitrates and severe responses (nausea, vomiting, weakness, restlessness, pallor, perspiration, and collapse) may occur even with the usual therapeutic dose. Drug rash and/or exfoliative dermatitis may occasionally occur. Nausea and vomiting appear to be uncommon. Case reports of clinically significant methemoglobinemia are rare at conventional doses of organic nitrates. The formation of methemoglobin is dose-related and, in the case of genetic abnormalities of hemoglobin that favor methemoglobin formation, even conventional doses of organic nitrate could produce harmful concentrations of methemoglobin.

DOSAGE AND ADMINISTRATION: For the treatment of angina pectoris, the usual starting dose for sublingual SORBITRATE is 2.5 to 5 mg; for chewable tablets, 5 mg; for oral (swallowed) tablets, 5 to 20 mg; and for controlled-release forms, 40 mg.

SORBITRATE should be titrated upward until angina is relieved or side effects limit the dose. In ambulatory patients, the magnitude of the incremental dose increase should be guided by measurements of standing blood pressure.

The initial dosage of sublingual or chewable SORBITRATE for prophylactic therapy in angina pectoris patients is generally 5 or 10 mg every 2 to 3 hours. Adequate controlled clinical studies demonstrating the effectiveness of chronic maintenance therapy with these dosage forms have not been reported.

SORBITRATE in oral doses of 10 to 40 mg given every 6 hours or in oral controlled-release doses of 40 to 80 mg given every 8 to 12 hours is generally recommended. The extent to which development of tolerance should modify the dosage program has not been defined. *The oral controlled-release forms of isosorbide dinitrate should not be chewed.*

DOSAGE FORMS AVAILABLE: Sublingual Tablets (2.5, 5, 10 mg); Chewable Tablets (5, 10 mg); Oral Tablets (5, 10, 20, 30, 40 mg); Sustained Action Tablets (40 mg).

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An Approach to the Prevention of Complications of Diabetes

Michael A. Schmitt, M.D., M.P.H., Trenton*

A publication of the National Diabetes Advisory Board, "The Prevention and Treatment of Five Complications of Diabetes: A Guide for the Primary Care Practitioner," provides a preventive methodology concerning the detection and prevention of five major complications of diabetes.

Diabetes mellitus exerts a tremendous impact upon our economic and health care systems and remains a significant cause of morbidity and mortality. Approximately 10 million people have diabetes nationwide, while in New Jersey there are an estimated 190,000 diagnosed diabetics (with at least an equal number undiagnosed). Furthermore, in New Jersey and the United States, the number of diabetics is expected to double by 1990.

During the past decade, there have been major advances in the treatment of diabetes. Methods for improved control include home glucose monitoring, better quality of insulins, measurement of glycosylated hemoglobin, and multiple daily insulin injections. Oral hypoglycemic agents have been re-evaluated and now are considered an appropriate pharmacologic intervention for certain type II diabetics. Investigations concerning the continuous subcutaneous insulin infusion pump continue to assess its long-term viability as a treatment alternative.

There also have been improvements in surgical techniques to effectively treat various long-term diabetic complications. Examples are bypass surgery for vascular occlusive disease, renal transplant for kidney failure, and laser treatment for proliferative retinopathy.

Patient education and lifestyle changes have become increasingly important as a proper diet, an exercise program, and a weight reduction plan can obviate the need for pharmacologic therapy in many type II diabetics.

Moreover, as the overall survival of patients with diabetes has lengthened, it increasingly has become important to grasp an understanding of the complications of diabetes and, at the same time, realize that many of these problems now are preventable.

To provide information about reducing many of the long-term complications of diabetes, the National Diabetes Advisory Board in February 1983 released for publication, "The Prevention and Treatment of Five Complications of Diabetes: A Guide for Primary Care Practitioners." Although the guide is intended for primary care providers, it is useful for all health professionals who provide care for diabetics. The guide contains a synthesis of recommendations relating to the detection and prevention of five major complications of diabetes—visual impairment, adverse outcomes in pregnancy, foot complications, renal complications, and acute hyperglycemia and ketoacidosis. It is not intended to be a therapeutic manual but it provides a methodology for preventive measures that can be implemented in an outpatient setting.

*From the New Jersey State Department of Health, Division of Community Health Services. Correspondence may be addressed to Dr. Schmitt, Department of Health, Division of Community Health Services, CN-364, Trenton, NJ 08625.

As summarized in a previous announcement by the National Diabetes Advisory Board, the guide[1] highlights each of the following complications:

1. **Visual Impairment.** Diabetes is a major cause of blindness in the United States. About 5,000 new cases of blindness related to diabetes are reported annually. After 10 years of diabetes, half of all patients have retinopathy. Although, for the most part, the condition does not affect or threaten vision, in a subset of patients the retinopathy progresses to proliferative retinopathy that threatens vision. The guide contains detailed information on detection, monitoring, and referral of patients with each stage of retinopathy.

2. **Detection and Prevention of Adverse Outcomes in Pregnancy.** Each year 10,000 babies are born to diabetic women, and 60,000 to 90,000 babies are born to women with gestational diabetes. There are significant problems, not only for diabetic women during pregnancy but for their infants as well. The high morbidity and mortality that threaten diabetic pregnancies can be reduced significantly by careful monitoring and intensive metabolic management. The guide gives a detailed schedule for the care of diabetic pregnant women during each trimester.

3. **Detection and Prevention of Foot Problems.** Amputations are many times more common among patients with diabetes than among the nondiabetic population. Diabetic foot lesions result from peripheral vascular disease leading to inadequate blood supply and from neuropathy, resulting in reduced sensitivity of the foot. The presence of these conditions makes the feet of the person with diabetes highly susceptible to serious injuries, ulceration, gangrene, infection, and, ultimately, amputation. The guide contains a detailed discussion of a complete foot examination and referral recommendations for various conditions.

4. **Detection and Prevention of Kidney Problems.** About 4,000 new cases of end-stage renal disease occur in diabetic patients each year. These account for one-quarter of all new cases of end-stage renal failure. In diabetic renal disease, proteinuria usually is the first clinically apparent abnormality. Poor diabetes and blood pressure control may further aggravate renal damage. The guide outlines important treatment measures, education principles related to stages of renal function, and options for treatment of end-stage renal disease.

5. **Detection and Prevention of Acute Hyperglycemia and Ketoacidosis.** Diabetic ketoacidosis (DKA) and the acute metabolic decompensation that precedes it are severe but often preventable complications of diabetes caused by an insufficient level of circulating insulin. When DKA occurs, insulin deficiency usually is accompanied by stress, fever, catabolic hormone excess, and/or dehydration. In older patients, hyperglycemia, with subsequent dehydration and coma, can occur without ketosis (hyperosmolar nonketotic coma). The guide details explicit sick day instructions along with selected references.

CONCLUSION

The publication also discusses principles of patient education and includes a useful appendix (which can be photocopied) containing patient education materials, practitioner office guides, and reference information for provider, patient, and family.

Traditional medical education often has overemphasized diagnostic expertise to the exclusion of other health care approaches that might benefit the patient. A useful adjunct is needed in the form of a step-by-step plan for preventive care using clinical information set against specific guidelines. Making a timely treatment or referral decision before a complication progresses too far may have a profound effect on patient outcome, i.e. a prompt referral to an ophthalmologist before severe degenerative changes occur in a patient's retina may help save his vision.

Much of the initial responsibility for the proper management of diabetes, along with many other chronic diseases, resides with the primary care physician. It is here that many patients seek help initially—making this office setting an ideal starting point for the prevention of complications.

This guide works to achieve these objectives and it is hoped that it not only will improve recognition and therapy of diabetic complications but will lead to their prevention as well. "The Prevention and Treatment of Five Complications of Diabetes: A Guide for Primary Care Practitioners" may be obtained free of charge by contacting Patricia Barta, R.N., M.P.H., Coordinator, Diabetes Control Project, New Jersey State Department of Health, 120 South Stockton Street, Trenton, NJ 08625, or calling (609) 984-1329.

REFERENCE

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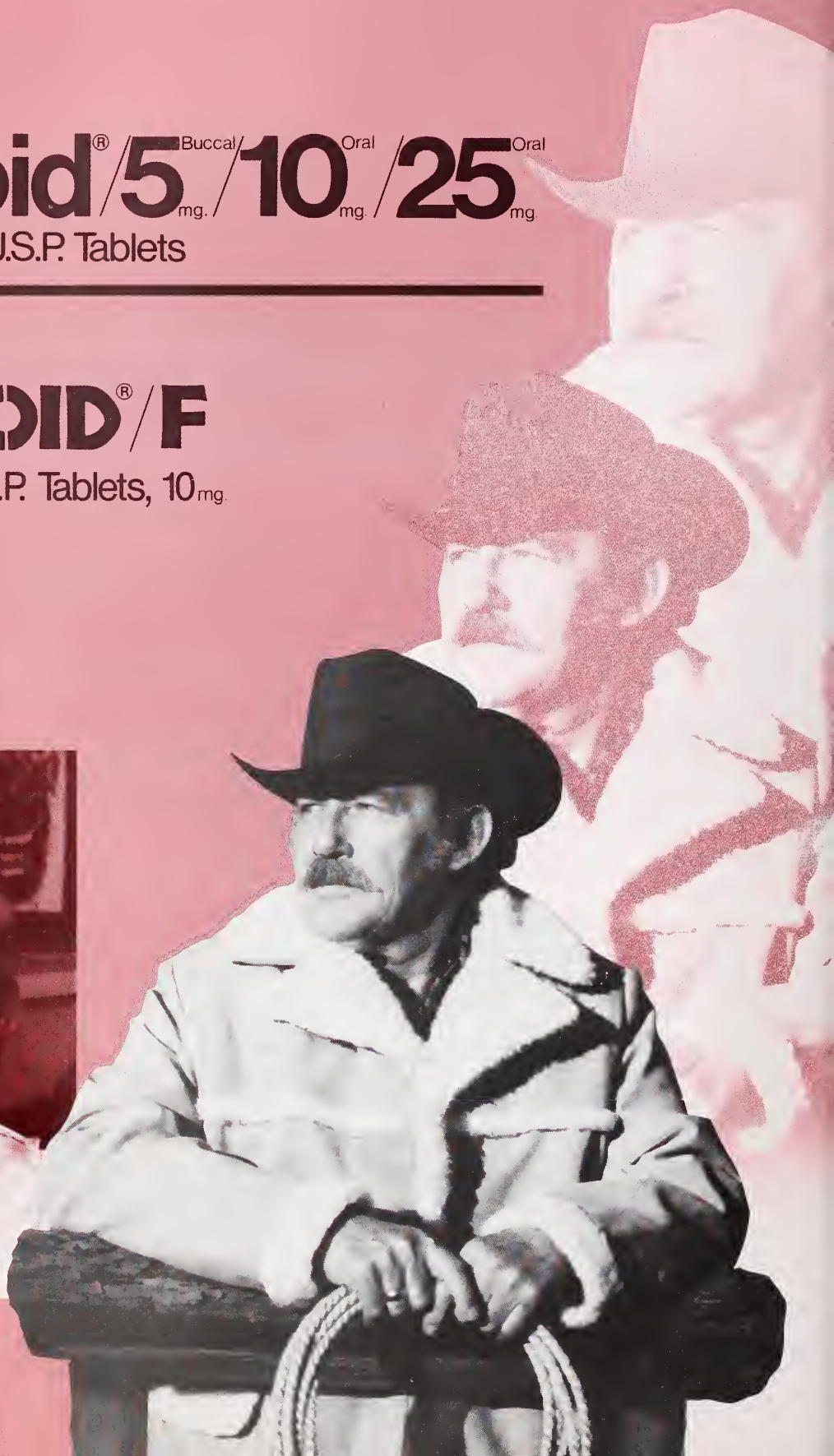
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Case Report: Cervical Thymoma

Alan W. Robbins, M.D., and Jay A. Peacock, M.D., Freehold*

Our patient developed a cervical tumor clinically mimicking a cold nodule of the thyroid gland. It had the classic histopathologic findings of thymoma, but showed no signs of local invasion. There have been no manifestations of recurrence, myasthenia gravis, or thymoma-associated paraneoplastic syndrome.

Thymoma is a tumor of thymic epithelial cells which most commonly occurs in the anterosuperior portion of the mediastinum.[1] The literature concerning thymomas, including their embryologic behavior and associated paraneoplastic syndromes, has been extensive and will not be reviewed here. However, there have been very few clinical descriptions of cervical thymomas.[2-5] This report describes the very rare occurrence of a thymoma clinically presenting as a cold nodule of the thyroid gland.

CASE REPORT

A 62-year-old white female complained of an asymptomatic mass of the left anterior neck of several months' duration. The patient denied any symptoms of hypo- or hyperthyroidism and there was no history of voice change, cough, dysphagia, chest pain, weight loss, or weakness. There had been several episodes of dyspnea due to congestive heart failure which was treated with digoxin. The past medical history included an appendectomy and cholecystectomy and reflux esophagitis which was treated with antacid therapy. There was no history of prior radiation exposure or malignancy.

Physical examination confirmed the presence of a 5 cm firm rubbery mass in the region of the lower pole of the left lobe of the thyroid gland. The trachea was slightly deviated to the right and the mass moved with deglutition. No other cervical masses or lymphadenopathy were present. The remainder of the physical examination was unremarkable.

Thyroid scan following a dose of 8 mCi ^{99m}Tc pertechnetate revealed diminished activity (cold nodule) in the inferior aspect of the left lobe of the thyroid, which was possibly due to an intrinsic or extrinsic lesion (Figure 1). The gland size was otherwise within normal limits. Ultrasound examination of the thyroid gland revealed a mass measuring 5.2 cm in length and 3.7 cm in depth located in the region of the lower pole of the left lobe with both echodense and cystic areas (Figures 2A and 2B). Radioactive iodine uptake was normal. Thyroid function studies were within normal limits. The peripheral hemogram was normal and the only abnormalities of the serum chemical profile were mildly elevated SGOT of 47mU/ml and SGPT of 38 IU/L. The chest x-ray revealed the trachea to be slightly shifted to the right but no mediastinal or lung masses were noted.

Surgical exploration of the thyroid gland revealed the left inferior pole to be replaced by a large encapsulated mass which appeared mildly lobulated and multicystic. The mass extended across the midline compressing the trachea and a yellow fatty pedicle ex-

*From the Departments of Surgery and Pathology, Freehold Area Hospital. Correspondence may be addressed to Dr. Robbins, 900 W. Main Street, Freehold, NJ 07728.



Figure 1—Thyroid scan demonstrating diminished activity ("cold nodule") in the inferior portion of the left lobe of the thyroid, which was possibly due to an intrinsic or extrinsic lesion.

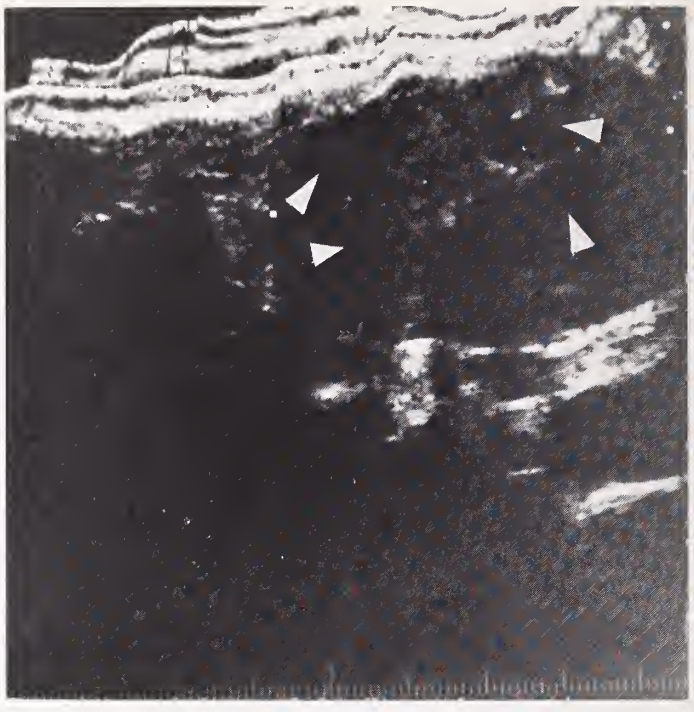
tended from the inferior portion of the mass into the anterosuperior mediastinum. The mass was readily shelled out from the thyroid fossa and was noted to be contiguous with the left lobe of the thyroid gland. The mass was resected in continuity with the left lobe and isthmus of the thyroid gland. The patient made an uneventful recovery.

A postoperative CAT scan of thorax and mediastinum revealed no evidence of mass lesion. The patient received a postoperative course of 4,000 rads of radiotherapy delivered by a linear accelerator to the upper mediastinum and lower neck. The patient has remained euthyroid and there has been no evidence of recurrence after 2 years. There has been no evidence of myasthenia gravis, anemia, hypogammaglobulinemia, or other thymoma-associated paraneoplastic syndrome.

PATHOLOGIC FINDINGS

The specimen measured 7 x 6 x 4 cm and weighed 20 gm. The external surface appeared reddish brown and well encapsulated. Yellow lobulated adipose tissue was attached to one portion. The cut surface revealed whitish tan nodular tissue containing multiple cysts ranging in diameter from 0.3 cm to 1.0 cm. The nodules were demarcated by white fibrous septae. The cystic spaces were smooth walled and contained reddish brown fluid. Two areas of grossly normal appearing thyroid tissue each measuring approximately 1.3 cm in greatest diameter were identified at the periphery of the specimen and both were separated from the remainder of the tissue by fibrous septae.

Hematoxylin-eosin stained histological sections were examined. A fibrous capsule of varying thickness enclosed the neoplasm and fibrous septae continuous with the capsule divided the tumor into nodules of variable size and shape (Figure 3). The tumor was composed predominantly of uniform closely packed epithelial cells with large round to oval-shaped vesicular nuclei. Nucleoli were inconspicuous and mitoses were extremely scanty. Some of the epithelial cells had spindle shaped nuclei. In focal areas, mature appearing lymphocytes with small darkly staining nu-





Figures 2A and 2B—Ultrasound examination of the thyroid gland demonstrating a mass located in lower pole of the left lobe with both echodense and cystic areas.

clei and undetectable cytoplasm were intermingled among the epithelial cells (Figure 4). Perivascular spaces of varying sizes as well as areas of cystic degeneration were present. Non-neoplastic thymic tissue with typical Hassall's corpuscles as well as germinal centers are present at the periphery of the thymoma. Histologically normal appearing thyroid tissue also was present in two areas at the periphery of the thymoma.

DISCUSSION

Thymomas most commonly arise in the anterosuperior mediastinum, but faulty embryologic development of the thymus gland can result in thymomas occurring in other portions of the mediastinum and very rarely in the neck. Embryologically, the thymus is derived from ventral outgrowths of the third



Figure 3—Histologic section demonstrating fibrous septae dividing the tumor into nodules.

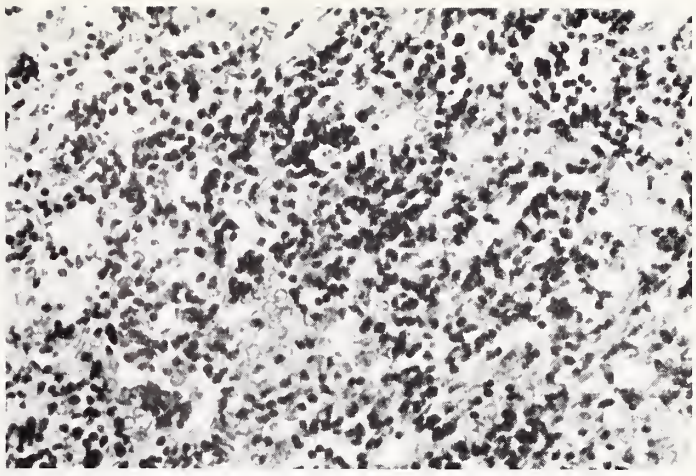


Figure 4—Mature lymphocytes intermingled among tumor epithelial cells.

and to a lesser extent the fourth pharyngeal pouches. By the eighth developmental week the right and left thymic portions have descended into the anterior mediastinum adjacent to the parietal pericardium. The thymus gland reaches maximum size in puberty and gradually involutes thereafter.

Aberrant development of the thymus gland occasionally results in small nodules of thymic tissue located anteriorly or laterally in the neck. Rarely, one or both lobes of the thymus gland fail to descend into the mediastinum, remaining situated high in the neck. In 1941, Gilmour reported the findings of a series of 13 autopsies performed on infants with thymic tissue located in aberrant positions.[6] In seven cases, the thymic tissue was either fused with or in close proximity to the parathyroid and thyroid glands.

Hydes reported a unilateral thymic cyst located in the upper neck below the angle of the right mandible.[7] In 1950, Arnheim and Gemson described a case of persistent cervical thymus gland.[8] Mosley and Som reported a 21-month-old child presenting with a cervical mass which surgically was excised and which the authors reported as representing a combination of incomplete descent and hypertrophy of the thymus gland.[9] Multiple other reports of non-neoplastic thymic tissue, located ectopically in the neck, have been published.[10-15] Kirschner, in 1969, described the surgical technique of total thymectomy through the neck in patients with myasthenia gravis.[16] The rationale for transcervical thymectomy is based upon the knowledge of the embryology of thymic descent and the fact that arrest of descent is not unusual.

A thymoma developing from a undescended thymus gland occurs rarely. In 1956, Sease reported a single case of "benign tumor of the thymus" measuring 5.0 cm in greatest diameter arising in the neck and attached by a pedicle to the thyroid gland.[2] In 1970, Ridenhour reported a thymoma arising in the right submandibular region and the authors stated after a review of the literature that only four other cases of cervical thymomas had been reported previously.[3] Sayler in a review of 65 cases of thymoma culled from the files of one large institution reported all but one of the thymomas were located in the anterior mediastinum.[4]

The one exception arose ectopically in the cervical region near the right lobe of the thyroid gland. Gray, in a study of 54 thymomas, reported all arose in the anterior mediastinum with three extending superiorly into the neck region, and only one of those three presenting clinically as a neck mass.[5]

It is our opinion that therapeutic management of cervical thymoma should be based upon the same criteria as that for mediastinal thymoma. For well encapsulated tumors, total extirpation constitutes appropriate treatment. For those tumors which are grossly invasive, surgical excision followed by radiotherapy is the preferred treatment.

SUMMARY

A 62-year-old white female developed an entirely cervical thymoma which clinically mimicked a cold nodule of the thyroid gland. The well encapsulated thymoma and the adjacent thyroid tissue and a pedicle of non-neoplastic thymic tissue which extended into the anterior mediastinum were excised. Histologically, the thymoma was composed predominantly of epithelial cells and there was hyperplasia with germinal center formation of the adjacent non-neoplastic thymic tissue, a histologic finding associated with increased incidence of myasthenia gravis.[4] However, this patient has manifested no evidence of tumor recurrence, of myasthenia gravis, or of other thymoma-associated paraneoplastic syndrome. Cervical thymomas presenting as neck masses are extremely rare with this case representing one of the less than ten cases reported in the literature.

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Opinion: Beware The Gatekeeper

Paul J. Hirsch, M.D., Bridgewater*

The gatekeeper concept is a form of rationing of health care, which never has been shown to be cost effective. It will affect all physicians and our patients: the ultimate gatekeeper will be a nonphysician.

A "medical service gatekeeper" is a person or group to whom a patient initially must present, and who must authorize any subsequent medical care. This mechanism for rationing health care is used by some HMO's and IPA's, and also has been instituted for some Medicaid programs.

The concept of the gatekeeper is gaining increasing prominence as a supposed means of controlling the cost of medical care. But, gatekeepers never have been shown to be cost effective; indeed, they may raise costs, while producing several serious problems. Moreover, these problems will affect all physicians, and all of our patients: the ultimate gatekeeper will be a nonphysician, a bureaucrat with guidelines of cost control, not a physician with skill and compassion.

In at least some areas, nonphysician gatekeepers have already been instituted. The Michigan-Ford Motor Company contracts required that patients seeking foot care must first see a podiatrist; they could not see a physician unless referred by a podiatrist. Under the same contract, patients must first see the Sterling Optical Company at one of their shops, before referral to an ophthalmologist. The penalty for using other providers is a 50 percent copayment charge.[1] Although the limitation of initial foot care to podiatrists was renegotiated, the lesson remains clear. It is anticipated that nurses and perhaps clerks also may be "trained" to be gatekeepers, bypassing primary care physicians with direct (and perhaps inappropriate) referrals to other specialists.

An important disadvantage of the gatekeeper concept is the loss of freedom for the patient. In part, the gatekeeper concept is intended to decrease "doctor shopping" and in many programs, patients are locked into their primary care physician. It is not possible to see another primary care physician, or any other physician, without the consent of the original physician. The freedom of a patient to select a physician of his or her choice, is an important freedom; any decrease of this freedom is an important loss. Once we abandon this cherished principle for any group of patients, no longer can we defend it for others.[2]

The gatekeeper system also is anticompetitive, at a time when the federal government states that it wishes to promote competition in the health care field. By placing some physicians (the gatekeepers) in a position of primacy over others, it will decrease the challenge that these physicians may have had to keep up with advances in medicine. It therefore may lead

*Dr. Hirsch is Clinical Associate Professor of Surgery (Orthopaedics), UMDNJ-New Jersey Medical School; Chairman of the Committee on Publication, MSNJ; and Treasurer, MSNJ. Correspondence may be addressed to Dr. Hirsch, Green Knoll Professional Building, 720 U.S. Highway 202-206, Bridgewater, NJ 08807.

to mediocrity in our medical system. Competition between physicians, within the same specialty, and across specialty lines, always has helped to maintain the quality of medical care in this country.

A physician who is a gatekeeper may or may not be at financial risk for referrals to other physicians. In either event, there are many possible abuses of this system. If a primary care physician gatekeeper is financially at risk for referrals to specialists, then there will be a temptation to under-refer. If the gatekeeper physician receives a fixed payment for primary care and is not at risk for referrals, then the gatekeeper may refer as much care as possible to other physicians, in order to maximize income. If the gatekeeper receives a fixed capitation for primary care regardless of patient encounters, there will be temptation to discourage or delay patient visits.[3] There will be an economic incentive for the gatekeeper who is financially at risk, to refer to the least expensive consultant, rather than to the most appropriate or most capable consultant.

Another problem can occur when the gatekeeper program provides for "capping" of referrals; that is, the gatekeeper may authorize only one visit to a consultant, with followup care by the gatekeeper. This is unrewarding for the consultant; it does not allow for continued care, and will not allow the development of the warm, personal relationship with patients which is so important in quality care, as well as in the prevention of litigation.

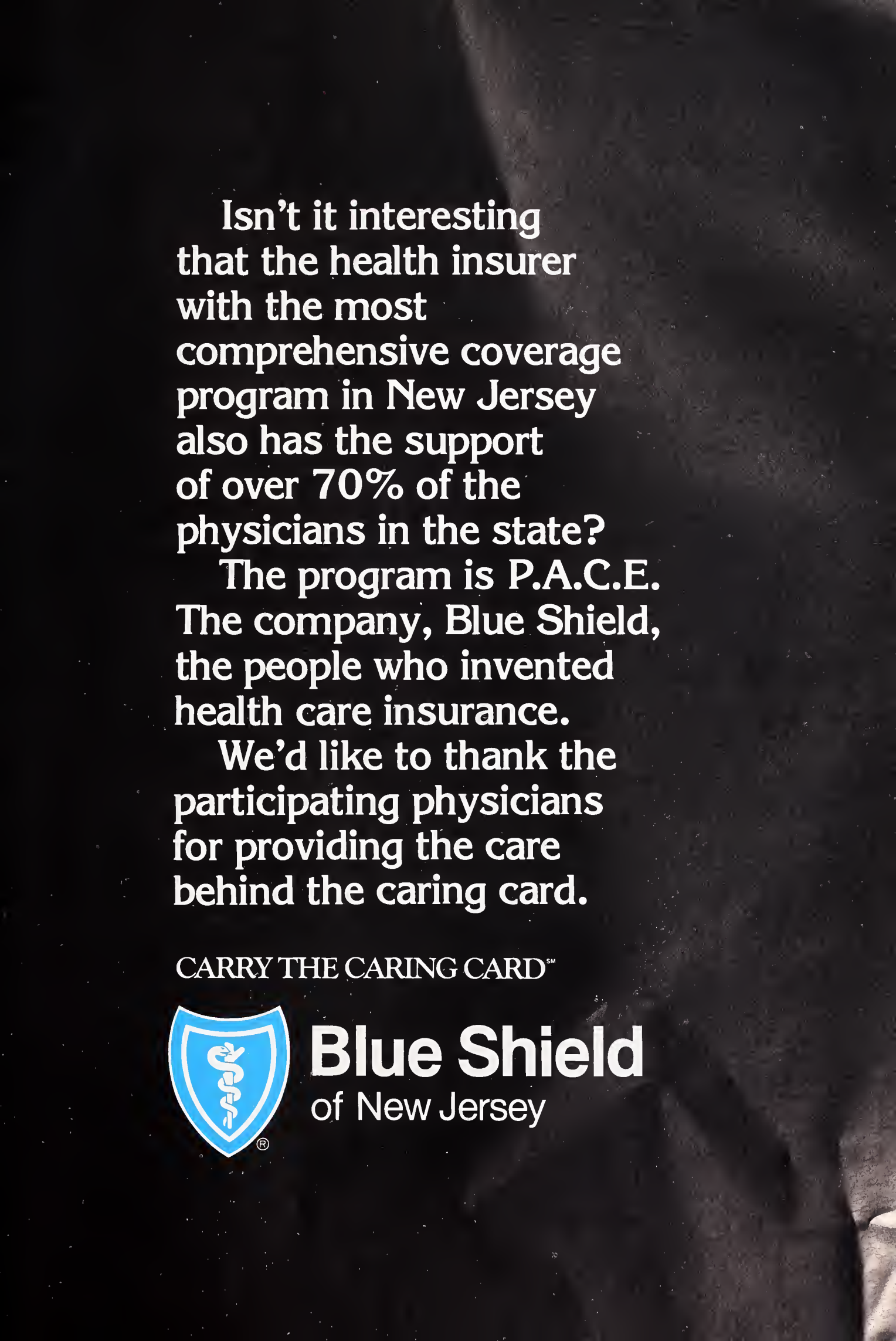
There seems to be no overriding benefit to compensate for the possible disadvantages and abuses of a gatekeeper system. There is no evidence to indicate that a primary physician, or any other physician, or any other gatekeeper, provides the most cost-effective care. Indeed, the opposite may be true. It is likely that the most appropriate primary care physician or other specialist, by providing quick diagnosis and effective treatment, also will provide the most cost-effective medical care.

Interestingly, one proposed "Physician DRG" program would make the admitting physician of each hospitalized patient a gatekeeper of sort, one who will be financially at risk and have strong economic disincentives to call in the family physician or other consultants to participate in the care of the patient.

All physicians, and all those concerned with the quality of medical care, should resist the gatekeeper concept.

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Isn't it interesting that the health insurer with the most comprehensive coverage program in New Jersey also has the support of over 70% of the physicians in the state?

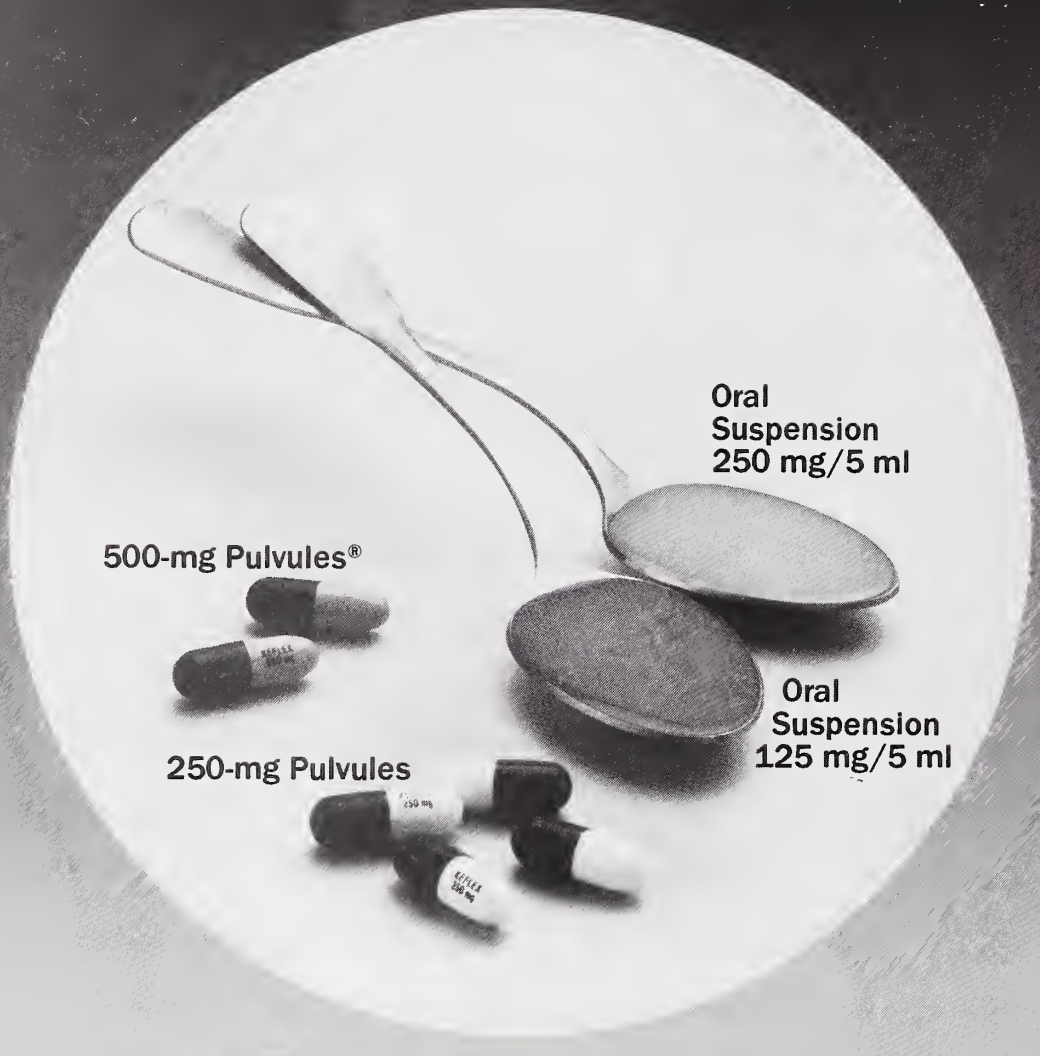
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Commentary: The Peer Review Organization of New Jersey, Inc.

David I. Kingsley, M.D., East Brunswick*

The President of The Peer Review Organization of New Jersey, Inc. presents an overview of the role, function, and objectives of this organization for all physicians.

There have been concerns and confusions regarding the role of The Peer Review Organization (PRO) of New Jersey, its membership and functions, and its objectives in the state. A brief overview of the current situation will be useful.

Medicare and other entitlement programs were enacted into law by the United States government in 1964 and took effect in 1965. It soon became apparent that the projected costs of these programs were woefully underestimated. In an effort to control and monitor these costs, the government caused to be created utilization review committees in hospitals. These proved to be largely ineffective. The government then proposed "program review teams" in order to monitor physician performance. These teams were to be composed of some physicians, health care professionals, health care "consumers," and other lay personnel. It must be understood that the government has the right and obligation to review costs for those services or goods obtained by contract. For example, a cost overrun on a defense project must be scrutinized and justified. The AMA objected to this proposed program and lobbied for a review process to be performed only by physicians. As a result, in 1970, Senator Wallace Bennet of Utah proposed and ultimately created Professional Standards Review Organizations, beginning in 1972, to be composed solely of practicing physicians from local medical communities. With the seed money provided, many hardy individuals, realizing that physicians must get involved actively with the review process or lose control of same, formed, with success, PSROs, in each state. Over a period of years, it was demonstrated that the PSROs saved approximately $3 for every $1 expended for medical care in this country simply by assuring that Medicare admissions were appropriate, timely, and for a reasonable length of stay.[1] Despite their success, the Reagan administration attempted to replace the review function of the physicians constituting the PSROs by fiscal intermediaries or third-party payors, i.e., insurance companies: Prudential, Travelers, Blue Cross. After successful intervention and support by the AMA, the American Hospital Association, the Washington Business Group on Health, the American Association of Retired Persons, the American Nursing Association, and other concerned parties, the government created, instead, the new Peer Review Organization legislation in the fall of 1982. The newly formed PROs replaced the prior PSROs in performing essentially the same functions as noted above. It was evident that most health care professionals would much rather deal with physicians performing review and monitoring quality of care than with clerks and other bureaucrats representing the fiscal intermediaries.

*Dr. Kingsley is President, The Peer Review Organization of New Jersey, Inc.

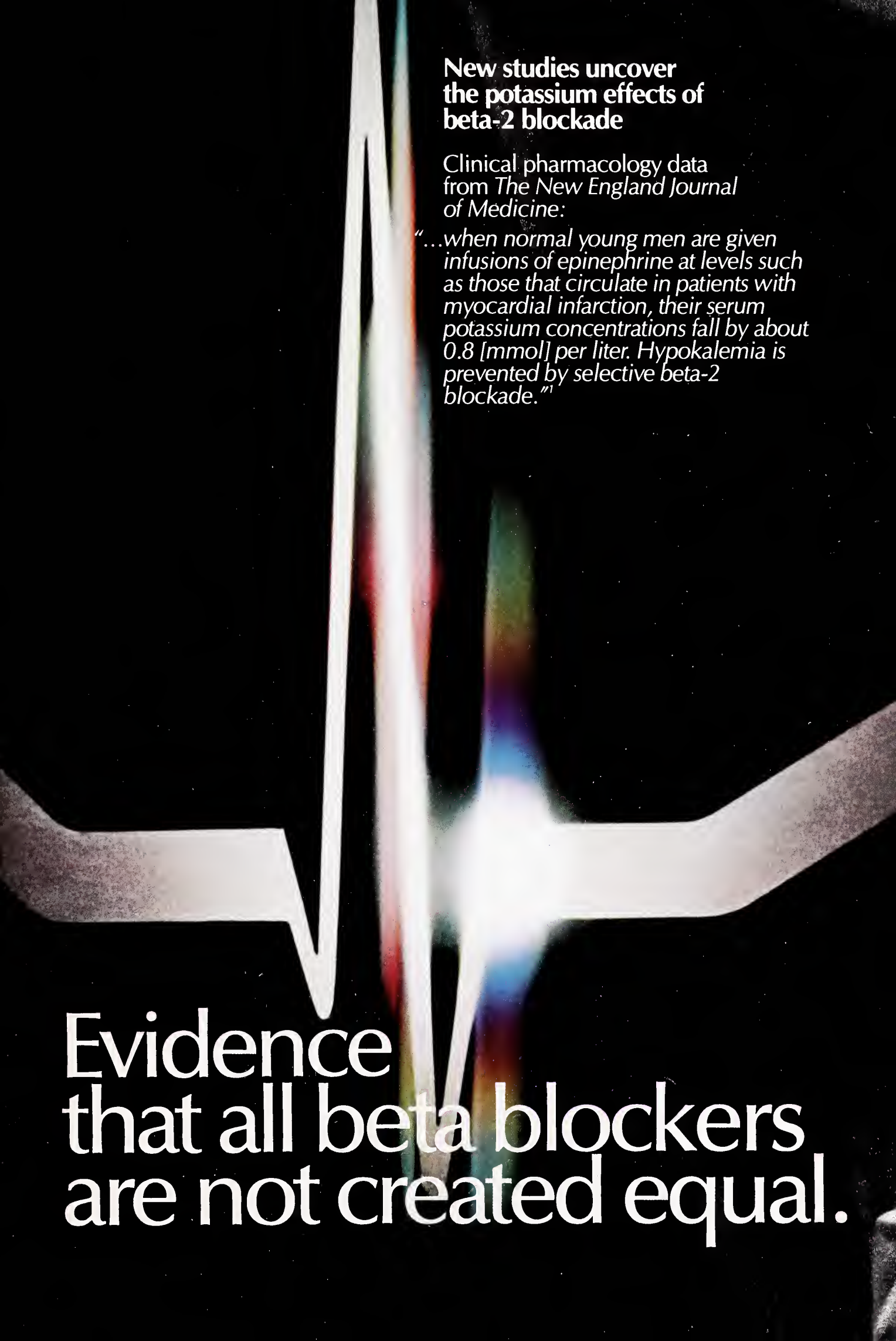
The current Peer Review Organization of New Jersey represents the final structure of the previously existing eight separate professional standards review organizations in this state. It is a nonprofit organization and by law and by definition, it is composed solely of volunteer, licensed physicians in the active practice of medicine in New Jersey. The medical directors are the only salaried physician employees. Statistically, approximately 47 percent of physicians statewide are members. All of the review processes and objectives are derived by physicians from each local community, using local and statewide data. Representative physicians from all parts of the state serve on committees establishing those criteria and modifying other objectives as proposed by federal and state governments (DRGs). This organization represents, in essence, the last interface or advocate between state or federal governmental regulation and the practicing physician. The question is not PRO or nothing, since the respective governments will not forego monitoring use of significant taxpayer revenues. The question, in reality, is which organization most adequately can represent the interests of the physician engaged in the active practice of medicine in this state? Further, would that practicing physician prefer to deal with an insurance company secretary or clerk monitoring his practice or, rather, a peer physician from his own hospital? The present scope of work of The PRO of New Jersey differs in some specific particulars from the prior functions of the PSROs. Certain procedures, for example, have been selected for preadmission certification. Other procedures will be monitored for specific complications in an effort to diminish the occurrence of significant morbidity and/or mortality. Most controversial and of greatest threat to the hospitals of this state is the ability of the PRO to issue retrospective denials for unnecessary admissions or inappropriate lengths of stay of patients. This carries the concomitant risk of revenue loss since the hospitals themselves no longer may issue their own letters of denial for perceived abuses, as in the past. While apparently ominous, the goals and objectives of The PRO of New Jersey must be contrasted with those in use by the 53 other PROs in this country. For example, many are performing preadmission certification on all federal admissions and are pursuing quality objectives which we feel are unrealistic. In our own negotiations with the Health Care Financing Administration, we refused to follow suit with similar inappropriate goals in the pursuit of a federal contract. HCFA will publish the nationwide goals and objectives of all PROs in this country in the near future; at that time, physicians in this state will be able to contrast our more rational objectives with those of other states. Under the circumstances, it is our belief that the guidelines for this state will prove least objectionable and most functional.

It should be noted that despite the active support of the Medical Society of New Jersey, the local county medical societies, as well as the New Jersey Hospital Association, there remain those physicians and administrators who vigorously oppose, through ignorance, misunderstanding, or misrepresentation, the activities of the PRO. They maintain that they themselves best could determine the interests of the New Jersey physician. While the interests of hospitals and physicians usually are parallel, they invariably are not synonymous and occasionally are competitive. Since hospitals, by law, may not monitor themselves, some apparently would prefer to deal with the insurance companies rather than allow for any degree of physician self-review. The interests of the fiscal intermediaries are manifest similarly by the recent gratuitous freeze on physicians' fees instituted by Blue Shield, similar to that enacted recently by the federal government.

We readily would agree that no regulation or monitoring is to be most preferred. Since that is not likely to recur in the near future, with the United States government funding approximately 45 percent of the national annual health care bill in excess of $400,000,000,000, the relevant question then remains: Who is best qualified to deal with the medical issues affecting all of us. It is our contention that while not flawless and occasionally intrusive, The PRO of New Jersey best is suited for those purposes. This organization is responsive to your needs and concerns. The care of the patient and the interests of the physicians remain uppermost in our activities and will continue to do so in the future despite ever-increasing federal intervention with threats of DRG payments to physicians[2] or the specter of health care rationing.[3] If you have any questions or comments regarding the above, The PRO of New Jersey or myself would be pleased to respond to same. We sincerely would welcome your joining this organization and participating in our activities, as many of your colleagues have already done.

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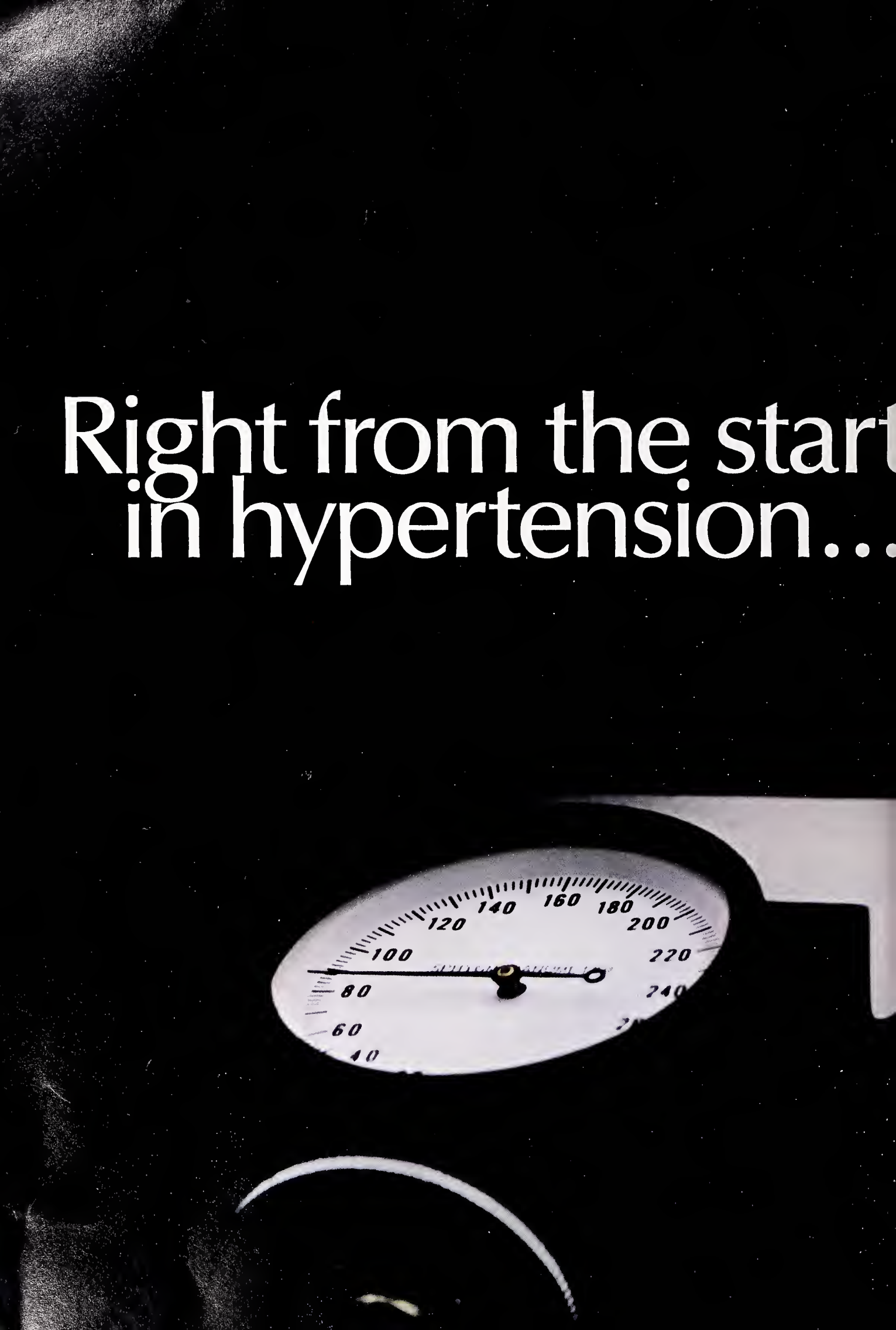
New studies uncover the potassium effects of beta-2 blockade

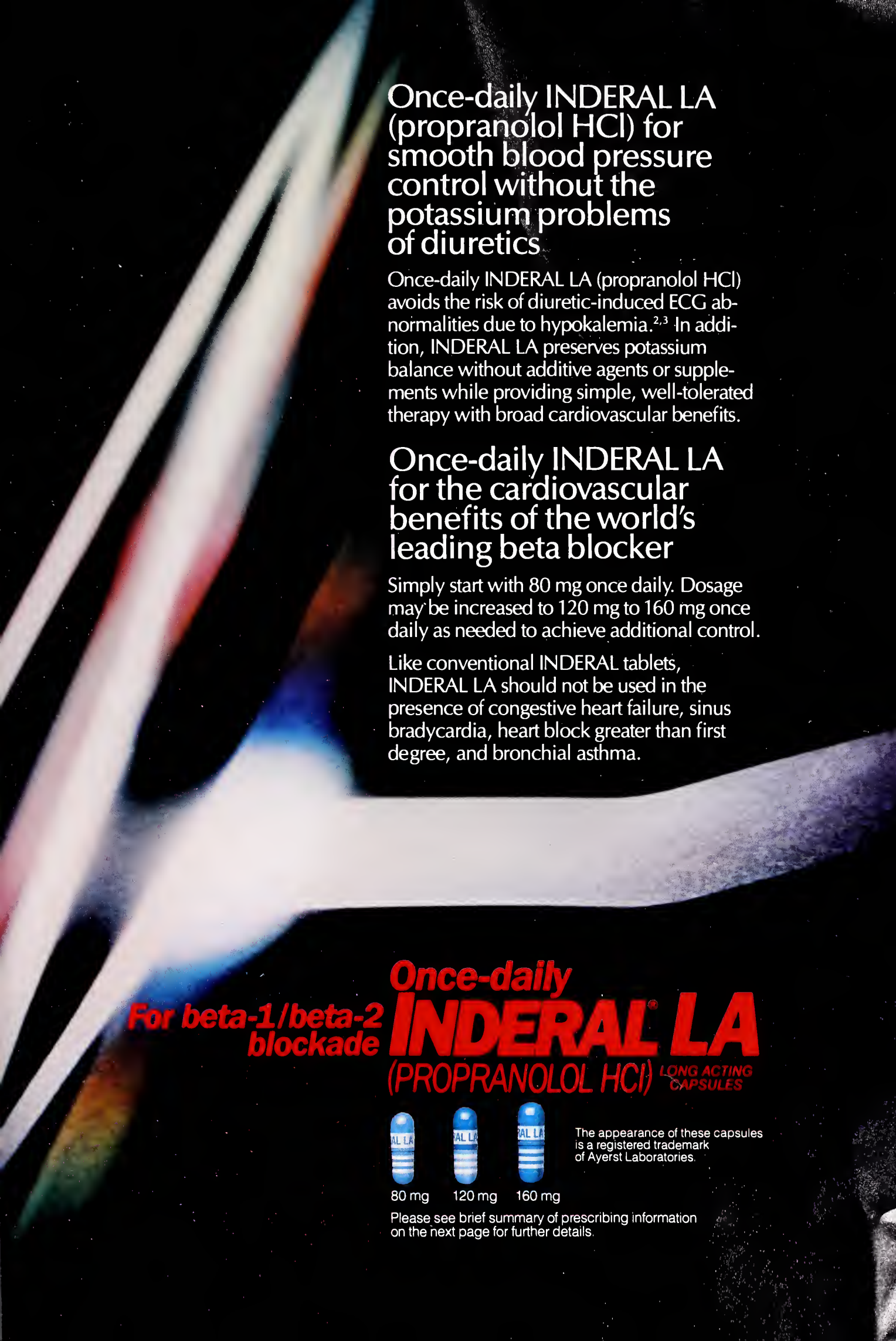
Clinical pharmacology data from *The New England Journal of Medicine:*

"...when normal young men are given infusions of epinephrine at levels such as those that circulate in patients with myocardial infarction, their serum potassium concentrations fall by about 0.8 [mmol] per liter. Hypokalemia is prevented by selective beta-2 blockade."[1]

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Once-daily INDERAL LA (propranolol HCl) avoids the risk of diuretic-induced ECG abnormalities due to hypokalemia.[2,3] In addition, INDERAL LA preserves potassium balance without additive agents or supplements while providing simple, well-tolerated therapy with broad cardiovascular benefits.

Once-daily INDERAL LA for the cardiovascular benefits of the world's leading beta blocker

Simply start with 80 mg once daily. Dosage may be increased to 120 mg to 160 mg once daily as needed to achieve additional control.

Like conventional INDERAL tablets, INDERAL LA should not be used in the presence of congestive heart failure, sinus bradycardia, heart block greater than first degree, and bronchial asthma.

For beta-1/beta-2 blockade

Once-daily INDERAL® LA

(PROPRANOLOL HCl) LONG ACTING CAPSULES

80 mg 120 mg 160 mg

The appearance of these capsules is a registered trademark of Ayerst Laboratories.

Please see brief summary of prescribing information on the next page for further details.

For beta-1/beta-2 blockade — Once-daily INDERAL® LA (PROPRANOLOL HCl) LONG ACTING CAPSULES



The appearance of these capsules is a registered trademark of Ayerst Laboratories.

BRIEF SUMMARY *(FOR FULL PRESCRIBING INFORMATION, SEE PACKAGE CIRCULAR.)*

INDERAL® LA brand of propranolol hydrochloride **(Long Acting Capsules)**

DESCRIPTION. Inderal LA is formulated to provide a sustained release of propranolol hydrochloride. Inderal LA is available as 80 mg, 120 mg, and 160 mg capsules.

CLINICAL PHARMACOLOGY. INDERAL is a nonselective beta-adrenergic receptor blocking agent possessing no other autonomic nervous system activity. It specifically competes with beta-adrenergic receptor stimulating agents for available receptor sites. When access to beta-receptor sites is blocked by INDERAL, the chronotropic, inotropic, and vasodilator responses to beta-adrenergic stimulation are decreased proportionately.

INDERAL LA Capsules (80, 120, and 160 mg) release propranolol HCl at a controlled and predictable rate. Peak blood levels following dosing with INDERAL LA occur at about 6 hours and the apparent plasma half-life is about 10 hours. When measured at steady state over a 24-hour period the areas under the propranolol plasma concentration-time curve (AUCs) for the capsules are approximately 60% to 65% of the AUCs for a comparable divided daily dose of INDERAL tablets. The lower AUCs for the capsules are due to greater hepatic metabolism of propranolol, resulting from the slower rate of absorption of propranolol. Over a twenty-four (24) hour period, blood levels are fairly constant for about twelve (12) hours then decline exponentially.

INDERAL LA should not be considered a simple mg for mg substitute for conventional propranolol and the blood levels achieved do not match (are lower than) those of two to four times daily dosing with the same dose. When changing to INDERAL LA from conventional propranolol, a possible need for retitration upwards should be considered especially to maintain effectiveness at the end of the dosing interval. In most clinical settings, however, such as hypertension or angina where there is little correlation between plasma levels and clinical effect, INDERAL LA has been therapeutically equivalent to the same mg dose of conventional INDERAL as assessed by 24-hour effects on blood pressure and on 24-hour exercise responses of heart rate, systolic pressure and rate pressure product. INDERAL LA can provide effective beta blockade for a 24-hour period.

The mechanism of the antihypertensive effect of INDERAL has not been established. Among the factors that may be involved in contributing to the antihypertensive action are (1) decreased cardiac output, (2) inhibition of renin release by the kidneys, and (3) diminution of tonic sympathetic nerve outflow from vasomotor centers in the brain. Although total peripheral resistance may increase initially, it readjusts to or below the pretreatment level with chronic use. Effects on plasma volume appear to be minor and somewhat variable. INDERAL has been shown to cause a small increase in serum potassium concentration when used in the treatment of hypertensive patients.

In angina pectoris, propranolol generally reduces the oxygen requirement of the heart at any given level of effort by blocking the catecholamine-induced increases in the heart rate, systolic blood pressure, and the velocity and extent of myocardial contraction. Propranolol may increase oxygen requirements by increasing left ventricular fiber length, end diastolic pressure and systolic ejection period. The net physiologic effect of beta-adrenergic blockade is usually advantageous and is manifested during exercise by delayed onset of pain and increased work capacity.

In dosages greater than required for beta blockade, INDERAL also exerts a quinidine-like or anesthetic-like membrane action which affects the cardiac action potential. The significance of the membrane action in the treatment of arrhythmias is uncertain.

The mechanism of the antimigraine effect of propranolol has not been established. Beta-adrenergic receptors have been demonstrated in the pial vessels of the brain.

Beta receptor blockade can be useful in conditions in which, because of pathologic or functional changes, sympathetic activity is detrimental to the patient. But there are also situations in which sympathetic stimulation is vital. For example, in patients with severely damaged hearts, adequate ventricular function is maintained by virtue of sympathetic drive which should be preserved. In the presence of AV block, greater than first degree, beta blockade may prevent the necessary facilitating effect of sympathetic activity on conduction. Beta blockade results in bronchial constriction by interfering with adrenergic bronchodilator activity which should be preserved in patients subject to bronchospasm.

Propranolol is not significantly dialyzable.

INDICATIONS AND USAGE. Hypertension: INDERAL LA is indicated in the management of hypertension; it may be used alone or used in combination with other antihypertensive agents, particularly a thiazide diuretic. INDERAL LA is not indicated in the management of hypertensive emergencies.

Angina Pectoris Due to Coronary Atherosclerosis: INDERAL LA is indicated for the long-term management of patients with angina pectoris.

Migraine: INDERAL LA is indicated for the prophylaxis of common migraine headache. The efficacy of propranolol in the treatment of a migraine attack that has started has not been established and propranolol is not indicated for such use.

Hypertrophic Subaortic Stenosis: INDERAL LA is useful in the management of hypertrophic subaortic stenosis, especially for treatment of exertional or other stress-induced angina, palpitations, and syncope. INDERAL LA also improves exercise performance. The effectiveness of propranolol hydrochloride in this disease appears to be due to a reduction of the elevated outflow pressure gradient which is exacerbated by beta-receptor stimulation. Clinical improvement may be temporary.

CONTRAINDICATIONS. INDERAL is contraindicated in 1) cardiogenic shock, 2) sinus bradycardia and greater than first degree block; 3) bronchial asthma; 4) congestive heart failure (see WARNINGS) unless the failure is secondary to a tachyarrhythmia treatable with INDERAL.

WARNINGS. CARDIAC FAILURE: Sympathetic stimulation may be a vital component supporting circulatory function in patients with congestive heart failure, and its inhibition by beta blockade may precipitate more severe failure. Although beta blockers should be avoided in overt congestive heart failure, if necessary, they can be used with close follow-up in patients with a history of failure who are well compensated and are receiving digitalis and diuretics. Beta-adrenergic blocking agents do not abolish the inotropic action of digitalis on heart muscle.

IN PATIENTS WITHOUT A HISTORY OF HEART FAILURE, continued use of beta blockers can, in some cases, lead to cardiac failure. Therefore, at the first sign or symptom of heart failure, the patient should be digitalized and/or treated with diuretics, and the response observed closely, or INDERAL should be discontinued (gradually, if possible).

IN PATIENTS WITH ANGINA PECTORIS, there have been reports of exacerbation of angina and, in some cases, myocardial infarction, following abrupt discontinuance of INDERAL therapy. Therefore, when discontinuance of INDERAL is planned the dosage should be gradually reduced over at least a few weeks, and the patient should be cautioned against interruption or cessation of therapy without the physician's advice. If INDERAL therapy is interrupted and exacerbation of angina occurs, it usually is advisable to reinstitute INDERAL therapy and take other measures appropriate for the management of unstable angina pectoris. Since coronary artery disease may be unrecognized, it may be prudent to follow the above advice in patients considered at risk of having occult atherosclerotic heart disease who are given propranolol for other indications.

Nonallergic Bronchospasm (e.g., chronic bronchitis, emphysema)— PATIENTS WITH BRONCHOSPASTIC DISEASES SHOULD IN GENERAL NOT RECEIVE BETA BLOCKERS. INDERAL should be administered with caution since it may block bronchodilation produced by endogenous and exogenous catecholamine stimulation of beta receptors.

MAJOR SURGERY: The necessity or desirability of withdrawal of beta-blocking therapy prior to major surgery is controversial. It should be noted, however, that the impaired ability of the heart to respond to reflex adrenergic stimuli may augment the risks of general anesthesia and surgical procedures.

INDERAL (propranolol HCl), like other beta blockers, is a competitive inhibitor of beta-receptor agonists and its effects can be reversed by administration of such agents, e.g., dobutamine or isoproterenol. However, such patients may be subject to protracted severe hypotension. Difficulty in starting and maintaining the heartbeat has also been reported with beta blockers.

DIABETES AND HYPOGLYCEMIA. Beta-adrenergic blockade may prevent the appearance of certain premonitory signs and symptoms (pulse rate and pressure changes) of acute hypoglycemia in labile insulin-dependent diabetes. In these patients, it may be more difficult to adjust the dosage of insulin.

THYROTOXICOSIS: Beta blockade may mask certain clinical signs of hyperthyroidism. Therefore, abrupt withdrawal of propranolol may be followed by an exacerbation of symptoms of hyperthyroidism, including thyroid storm. Propranolol does not distort thyroid function tests.

IN PATIENTS WITH WOLFF-PARKINSON-WHITE SYNDROME, several cases have been reported in which, after propranolol, the tachycardia was replaced by a severe bradycardia requiring a demand pacemaker. In one case this resulted after an initial dose of 5 mg propranolol.

PRECAUTIONS. *General:* Propranolol should be used with caution in patients with impaired hepatic or renal function. INDERAL (propranolol HCl) is not indicated for the treatment of hypertensive emergencies.

Beta adrenoreceptor blockade can cause reduction of intraocular pressure. Patients should be told that INDERAL may interfere with the glaucoma screening test. Withdrawal may lead to a return of increased intraocular pressure.

Clinical Laboratory Tests. Elevated blood urea levels in patients with severe heart disease, elevated serum transaminase, alkaline phosphatase, lactate dehydrogenase.

DRUG INTERACTIONS: Patients receiving catecholamine-depleting drugs such as reserpine should be closely observed if INDERAL is administered. The added catecholamine-blocking action may produce an excessive reduction of resting sympathetic nervous activity which may result in hypotension, marked bradycardia, vertigo, syncopal attacks, or orthostatic hypotension.

Carcinogenesis, Mutagenesis, Impairment of Fertility: Long-term studies in animals have been conducted to evaluate toxic effects and carcinogenic potential. In 18-month studies in both rats and mice, employing doses up to 150 mg/kg/day, there was no evidence of significant drug-induced toxicity. There were no drug-related tumorigenic effects at any of the dosage levels. Reproductive studies in animals did not show any impairment of fertility that was attributable to the drug.

Pregnancy: Pregnancy Category C. INDERAL has been shown to be embryotoxic in animal studies at doses about 10 times greater than the maximum recommended human dose.

There are no adequate and well-controlled studies in pregnant women. INDERAL should be used during pregnancy only if the potential benefit justifies the potential risk to the fetus.

Nursing Mothers: INDERAL is excreted in human milk. Caution should be exercised when INDERAL is administered to a nursing woman.

Pediatric Use: Safety and effectiveness in children have not been established.

ADVERSE REACTIONS. Most adverse effects have been mild and transient and have rarely required the withdrawal of therapy.

Cardiovascular: bradycardia; congestive heart failure; intensification of AV block; hypotension; paresthesia of hands; thrombocytopenic purpura; arterial insufficiency, usually of the Raynaud type.

Central Nervous System: lightheadedness; mental depression manifested by insomnia, lassitude, weakness, fatigue; reversible mental depression progressing to catatonia, visual disturbances; hallucinations; an acute reversible syndrome characterized by disorientation for time and place, short-term memory loss, emotional lability, slightly clouded sensorium, and decreased performance on neuropsychometrics.

Gastrointestinal: nausea, vomiting, epigastric distress, abdominal cramping, diarrhea, constipation, mesenteric arterial thrombosis, ischemic colitis.

Allergic: pharyngitis and agranulocytosis, erythematous rash, fever combined with aching and sore throat, laryngospasm and respiratory distress.

Respiratory: bronchospasm.

Hematologic: agranulocytosis, nonthrombocytopenic purpura, thrombocytopenic purpura.

Auto-Immune: In extremely rare instances, systemic lupus erythematosus has been reported.

Miscellaneous: alopecia, LE-like reactions, psoriasiform rashes, dry eyes, male impotence, and Peyronie's disease have been reported rarely. Oculomucocutaneous reactions involving the skin, serous membranes and conjunctivae reported for a beta blocker (practolol) have not been associated with propranolol.

DOSAGE AND ADMINISTRATION. INDERAL LA provides propranolol hydrochloride in a sustained-release capsule for administration once daily. If patients are switched from INDERAL tablets to INDERAL LA capsules, care should be taken to assure that the desired therapeutic effect is maintained. INDERAL LA should not be considered a simple mg for mg substitute for INDERAL. INDERAL LA has different kinetics and produces lower blood levels. Retitration may be necessary especially to maintain effectiveness at the end of the 24-hour dosing interval.

HYPERTENSION—*Dosage must be individualized.* The usual initial dosage is 80 mg INDERAL LA once daily, whether used alone or added to a diuretic. The dosage may be increased to 120 mg once daily or higher until adequate blood pressure control is achieved. The usual maintenance dosage is 120 to 160 mg once daily. In some instances a dosage of 640 mg may be required. The time needed for full hypertensive response to a given dosage is variable and may range from a few days to several weeks.

ANGINA PECTORIS—*Dosage must be individualized.* Starting with 80 mg INDERAL LA once daily, dosage should be gradually increased at three to seven day intervals until optimum response is obtained. Although individual patients may respond at any dosage level, the average optimum dosage appears to be 160 mg once daily. In angina pectoris, the value and safety of dosage exceeding 320 mg per day have not been established.

If treatment is to be discontinued, reduce dosage gradually over a period of a few weeks (see WARNINGS).

MIGRAINE—*Dosage must be individualized.* The initial oral dose is 80 mg INDERAL LA once daily. The usual effective dose range is 160-240 mg once daily. The dosage may be increased gradually to achieve optimum migraine prophylaxis. If a satisfactory response is not obtained within four to six weeks after reaching the maximum dose, INDERAL LA therapy should be discontinued. It may be advisable to withdraw the drug gradually over a period of several weeks.

HYPERTROPHIC SUBAORTIC STENOSIS—80-160 mg INDERAL LA once daily.

PEDIATRIC DOSAGE—At this time the data on the use of the drug in this age group are too limited to permit adequate directions for use.

REFERENCES

1. Epstein FH, Rosa RM: Adrenergic control of serum potassium. *N Engl J Med* 1983; 309:1450-1451. **2.** Holland OB, Nixon JV, Kuhnert L: Diuretic-induced ventricular ectopic activity. *Am J Med* 1981;70:762-768. **3.** Holme I, Helgeland A, Hjermann I, et al: Treatment of mild hypertension with diuretics. The importance of ECG abnormalities in the Oslo study and in MRFIT. *JAMA* 1984;251:1298-1299.

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DOCTORS' NOTEBOOK

Trustees' Minutes; UMDNJ Notes; MSNJ Auxiliary; New Members; Physicians Seeking Location in New Jersey

Trustees' Minutes January 20, 1985

A regular meeting of the Board of Trustees was held on Sunday, January 20, 1985, at the Executive Offices, in Lawrenceville. Detailed minutes are on file with the secretary of your county society. A summary of significant actions follows:

Report of the President . . .
Meetings on PRO . . . Noted that a preliminary meeting to address the PRO issue was well attended, and that future meetings have been arranged.

Report of Executive Director . . .
(1) MSNJ Paid 1984 Membership . . . Noted that as of December 31, 1984, MSNJ had 7,609 dues-paying members.
(2) MSNJ 1985 Paid Membership . . . Noted that as of January 14, 1985, MSNJ had 3,400 members.
(3) Specialty Society Petitions for Seating in House of Delegates . . . Approved the recommendation that the Vascular Society of New Jersey be granted representation in the House of Delegates. Approved the recommendation that the New Jersey Chapter-American Academy of Pediatrics not be granted a seat in the House of Delegates since it does not meet the criteria requirements.
(4) Hospital's Right To Deny Reappointment . . . Noted that a report will be submitted concerning an article in *Medical Economics* relating to a New Jersey case involving withdrawal of a physician's privileges because of his DRG performance.
(5) Professional Liability . . . Noted that the professional liability crisis in New York should be looked at cautiously and not compared to the situation in New Jersey.
(6) State of New Jersey Reinsurance Association Deficit . . . Noted that the position of MSNJ and MIIENJ will be accepted. Noted the position states only physicians and entities insured by the Reinsurance Association should be responsible for the deficit.
(7) No-Fault Fee Schedule . . . Reiterated opposition to a fee schedule arrangement.
(8) Review of MSNJ Financial Statements . . . Reviewed and approved the financial statements for the period ending December 31, 1984.
(9) Resident Physicians' Attendance at AMA Interim Meeting . . . Authorized payment for three resident physician members attending AMA Interim Meeting in Hawaii.

UMDNJ Report . . . Noted the following from Dr. Stanley Bergen: 1) informative article entitled "Public Perception of Medicine" is in the January 17, 1985, issue of the *New England Journal of Medicine*; 2) review of fraud cases in Caribbean medical schools is halfway completed; and 3) Association of American Colleges has agreed to re-examine funding of graduate medical education.

NJ Hospital Association . . .
(1) Medicare Waiver . . . Noted that the Health Care Financing Administration granted New Jersey a Medicare inpatient waiver effective January 1, 1985, through December 31, 1987, but still is considering whether to grant an outpatient waiver.
(2) TEFRA—Compliance and Implications . . . Noted that hospital physicians are not included in the waiver; the Hospital Rate-setting Commission approved the Department of Health's methodology for reimbursing hospitals for hospital-based physician costs.
(3) Hospital/PRO Agreement . . . Noted another version of a model agreement will be offered including: 1) the ability of hospitals to issue denial determinations; and 2) the obligations of the PRO to contact the treating physician prior to issuing a denial.
(4) Licensure and Certification . . . Noted that NJHA supports A-2554/S-2282 which establish criteria for licensure and review all requests for licensure.
(5) Indigent Care . . . Noted that NJHA will push for expansion to all categories (i.e. aged, handicapped, blind) as increased monies from Aid to Families with Dependent Children would reduce significantly the indigent care problem.

Committee on Impaired Physicians . . . Approved the following recommendation:

That the proposed protocol for the Management of Physicians with Physical Disabilities that Produce Impairment of Professional Performance be endorsed as an official document of the Impaired Physicians Program.

Committee on Emergency Medical Care . . .
(1) Medical Emergency Protocol . . . Approved the following recommendation:

That MSNJ adopt the protocol design by the American College of Emergency Physicians as guidelines for physicians who become involved in the treatment of a victim of a medical emergency.

(2) Freestanding Emergency Centers . . . Referred back to the Committee for investigation and review of the following questions: 1) Are there any Department of Health regulations involved? 2) What is the AMA policy? and 3) Should a signed agreement be obtained from the facility that will be accepting emergency cases when the emergency center is closed?

(3) Domestic Violence Seminar . . . Approved the following recommendations:

That MSNJ endorse the program designed by the Division of Women, New

Jersey Department of Community Affairs, entitled, "Hospital and Emergency Medical Personnel Training on Domestic Violence: Identifying and Referring Adult Victims."

Committee on Medical Aspects of Sports . . . Reviewed the following recommendation and acted on it as a two-part statement:

That MSNJ send a letter to the New Jersey State Interscholastic Athletic Association, with a copy to the New Jersey Department of Education, recommending a change in the regulations to permit the use of the Anderson brace and orthoplast.

Approved the Anderson "type" brace but felt the use of the orthoplast deserved further consideration and referred that portion of the recommendation back to the Committee.

New Business . . .
NJ Drug Utilization Review Council . . . Authorized the President to name a Society representative to the Drug Utilization Review Council.

UMDNJ Notes

Stanley S. Bergen, Jr., M.D.
President

Health care, medical education, and biomedical research in southern New Jersey will be made stronger and more efficient through a $15.65 million construction program assured in recent months by state appropriations.

Bills approved in the New Jersey Senate and Assembly and signed by Governor Thomas H. Kean will make possible two projects:

1) A $9.45 million building in Stratford for the UMDNJ-School of Osteopathic Medicine that will eliminate the present commute for students from their classroom, research, and library facilities in Camden to their clinical assignments at Kennedy Memorial Hospital-University Medical Center.

2) A $6.2 million addition to the Education and Research Building in Camden, which was completed and occupied last year. The expanded E&R Building will house the UMDNJ-Rutgers Medical School at Camden and the Institute for Medical Research, whose basic science research enjoys a wide reputation. This project will place offices and research laboratories of Rutgers Medical School at Camden across the street from its core teaching hospital, Cooper Hospital/University Medical Center. It also will open the way to an exciting partnership between our public health sciences university and the private research center of the Institute for Medical Research. There is potential here for attracting millions of new research dollars and private investment.

The osteopathic (D.O.) and allopathic (M.D.) medical programs in southern New Jersey were begun to meet a directive of the state legislature intended to relieve the shortage of physicians and other health care deficiencies in that part of the state.

The two years of clinical study in southern New Jersey are preceded by two years of basic science at the Newark campus of UMDNJ-New Jer-



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sey Medical School for the allopathic students and at the Piscataway campus of UMDNJ-Rutgers Medical School for the osteopathic students.

UMDNJ faculty members from our Newark campus are participating in a national effort to prove that early intervention with specialized care and rehabilitation markedly can improve the outcome for patients debilitated by spinal injuries.

The comprehensive system of handling spinal cord injuries operated by UMDNJ's University Hospital in Newark and the Kessler Institute for Rehabilitation in West Orange has been designated a national model program and given a $235,000 grant by the U.S. Department of Education. The six-year-old Spinal Cord Injury System will be strengthened by adding a regional education program, an early notification system, and a registry of spinal cord injuries at the State Health Department.

The first-year goal is to bring at least 35 percent of spinal cord injuries in the six counties of Essex, Union, Bergen, Morris, Passaic, and Hudson into the UMDNJ-Kessler system within 72 hours. The education program can be extended later to all 14 counties in the region.

New Jersey has about 300 spinal cord injuries a year, mostly from automobile accidents, falls, and diving mishaps. National results show that total paralysis is experienced less often by spinal cord patients treated in a system like that of UMDNJ-Kessler than by those cared for outside a comprehensive system.

The UMDNJ-Kessler system includes the regional trauma center and eight-bed Neuro-Intensive Care Unit at University Hospital in Newark and Kessler's 50-bed Spinal Cord Care Program in West Orange. Richard A. Sullivan, M.D., serves as acting chairman of rehabilitation medicine at UMDNJ-New Jersey Medical School and as medical director at the Kessler Institute. Sanders Davis, M.D., is a project director for the Spinal Cord Injury System.

The University has issued an annual report which incorporates the "State of the University" address delivered on January 16 to an audience consisting of Governor Kean, the UMDNJ Board of Trustees, UMDNJ Foundation board members, faculty, students, staff and other interested persons. At that program UMDNJ's "Medal for Distinguished Leadership" was presented to Governor Kean and State Senators Matthew Feldman of Bergen County and Christopher Jackman of Hudson County. Governor Kean was recognized for his support of UMDNJ and his strong commitment to excellence in New Jersey higher education. Senators Feldman and Jackman were honored for their 1981 roles in conferring university status on this public institution of health sciences education.

MSNJ Auxiliary

Grace Gellman
President

Members of the MSNJ Auxiliary have expressed interest in attending the mini-confluence, March 19-20, 1985, at the Ritz-Carlton Buckhead, Atlanta, Georgia, sponsored by the AMA Auxiliary. Among the subjects to be presented are child and sexual abuse, membership, fundraising, health concerns, legislative overviews, and time management. The meeting is open to all AMA Auxiliary members and friends. It is an opportunity to learn, care, and enjoy in the company of others with mutual interests and concerns. If you desire further information regarding this program, contact the AMA Auxiliary office in Chicago.

Notes from the Medical Society of New Jersey Auxiliary Executive Board meeting, January 14, 1985, are as follows:

1) The Auxiliary was pleased to welcome J. James Pegues, M.D., member of the Medical Society of New Jersey Advisory Committee to the Auxiliary.

2) Mrs. Margaret Fransckiewich has accepted the position of Executive Secretary of the Medical Society of New Jersey Auxiliary.

3) Mrs. B. Ralph Wayman, Chairman of the 1985-1986 Nominating Committee, presented the following slate of nominees: President-elect—Mrs. John Holdcraft, Gloucester; Vice-president—Mrs. Leonardo Ilagan, Burlington; Recording Secretary—Mrs. Alberto Taboada, Ocean; Corresponding Secretary—Mrs. Leonard Gold, Mercer; Treasurer—Mrs. Frank Campo, Mercer; and Director (1985 to 1988)—Mrs. John Sturgis, Gloucester.

4) Rev. Edward G. Reading presented details regarding the one-day seminar to be held on March 24, 1985, at the Medical Society headquarters, Lawrenceville. The topic will be "The Medical Family, Its Strengths, Its Weaknesses and Insuring Its Survival" and all members are encouraged to attend with their spouses.

5) The Auxiliary bids farewell to Mrs. Shirley M. Walsh who retired January 31, 1985. A resolution was tendered acknowledging her dedication and services over the last 25 years and expressing appreciation and gratitude.

New Members

The Journal of the Medical Society of New Jersey would like to welcome the following new members:

Atlantic County
James H. Thorpe, M.D., Atlantic City

Burlington County
Nathaniel R. Evans, M.D., Willingboro
Wayne L. Gibbons, M.D., Willingboro
Lorenzo Gonzales-Lavin, M.D., Browns Mills
James G. Nachbar, M.D., Moorestown
Gary E. Pearlstein, M.D., Mount Laurel
Mark J. Soffer, M.D., Willingboro

Camden County
Charles E. Bagwell, M.D., Camden

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Luis A. Cervantes, M.D., Cherry Hill
Richard T. Cook, Jr., M.D., Philadelphia
William G. DeLong, Jr., M.D., Camden
Shirley Chan Espino, M.D., Camden
Jack P. DiMarco, M.D., Camden
William F. Mills, M.D., Lindenwold
Alan D. Russakov, M.D., Camden
Frederic Steinberg, D.O., Stratford

Essex County
Brian F. Aurori, M.D., Roseland
Alberto M. Chavez, M.D., Newark
Joseph V. DiTrolio, M.D., Roseland
Kevin R. Dmytriw, M.D., Bloomfield
Kenneth B. Gantz, M.D., Millburn
John J. Giannone, M.D., Verona
Wesley R. Harden, M.D., Newark
Richard A. Irlando, M.D., West Orange
Allen S. Josephs, M.D., Livingston
Bernard J. Kulper, M.D., Newark
Kent S. Lerner, M.D., North Arlington
Susan R. Lessin, M.D., West Orange
Richard H. McShane, M.D., West Orange
Carl F. Mercurio, M.D., Bloomfield
Barbara A. Nahas, M.D., Millburn
Theodore Perl, M.D., West Orange
Barry S. Prystowsky, M.D., Nutley
Philip R. Seaver, Jr., M.D., Belleville
Pratap C. Singhal, M.D., Belleville
Alapatt P. Thomas, M.D., Irvington

Gloucester County
Rudolph T. DePersia, Jr., M.D., Woodbury
Antonio Sgro, M.D., Blackwood
Mark A. VanKooy, M.D., Woodbury

Hudson County
Michael J. Calache, M.D., Union City
Julie M. DiGioia, M.D., Jersey City
Mark Druck, M.D., Teaneck
Joseph D. Scalia, M.D., West New York
Vincent Serafino, M.D., Bayonne
Thomas E. Simpson, M.D., Bayonne

Mercer County
Paul B. Donovan, M.D., Pennington
David S. Eingorn, M.D., Lawrenceville
Suhaila S. Hussain, M.D., Trenton
Abbas B. Karimi, M.D., Plainsboro
Anthony J. Ricketti, M.D., Pennington
Byrne L. Solberg, M.D., Lawrenceville
Eric Tabas, M.D., Trenton
Michael P. Waligore, M.D., Trenton

Middlesex County
Joseph M. Alvaro, M.D., Somerset
Howard S. Cohen, M.D., Woodbridge
Michael Gochfeld, M.D., Piscataway
Mark H. Lazar, M.D., Edison
Robert C. Like, M.D., New Brunswick
William D. Miller, M.D., Old Bridge
Prem K. Rangala, M.D., New Brunswick
Andrea I. Reznik, M.D., Somerset
Henry J. Scharf, M.D., New Brunswick
Terezia M. Toth, M.D., New Brunswick
Lakshmi Vadapalli, M.D., Hidden Lake
Lawrence I. Weissman, M.D., Old Bridge

Morris County
Louise T. Barbieri, M.D., Morristown
Mitchel S. Carter, M.D., Boonton
Leigh Ende, M.D., Dover
Paul L. Fine, M.D., Morristown
Nina D. Reynolds, M.D., Morristown

Ocean County
Allan Cohen, M.D., Whiting
Leonard R. DiPisa, M.D., Bricktown
Robert J. Gorrell, Jr., M.D. Manahawkin
Roy D. Mittman, M.D., Bricktown
James L. Pasquariello, M.D., Holmdel
Garry D. Ruben, M.D., Bricktown
Leonard N. Silber, M.D., Lakewood
George Sollami, M.D., Point Pleasant
Wieslawa K. Trzaskowski, M.D., Toms River
John J. Vaccaro, M.D., Lakewood

Passaic County
Jay S. Berger, M.D., Little Falls
Ralph A. DeMaio, M.D., Totowa
Nihal K. De Silva, M.D., Wayne
Eleanor A. Gonnella, M.D., Clifton
Anthony A. Natelli, M.D., Wayne
Meena S. Patel, M.D., Paterson
Estela E. Reyes, M.D., Passaic
Daniel A. Rice, M.D., Clifton
Joseph Rozdeba, M.D., Passaic
Jose R. Sanchez-Pena, M.D., Paterson
Joseph G. Shami, M.D., Totowa

Union County
David Larkin, M.D., Vauxhall
L. Scott Larsen, M.D., Summit
Marelyn Medina-Rivera, M.D., Westfield
Daniel J. Moriarty, M.D., Westfield
Joseph F. Pensabene, M.D., Summit
Fred P. Scialabba, M.D., Plainfield

Warren County
Raymond S. Buch, M.D., Phillipsburg
Thomas E. Kantor, M.D., Phillipsburg

Physicians Seeking Location in New Jersey

The following physicians have written to the Executive Offices of MSNJ seeking information on possible opportunities for practice in New Jersey. The information listed below has been supplied by the physician. If you are interested in any further information concerning these physicians, we suggest you make inquiries directly to them.

ALLERGY—Narciso P. Mendoza, M.D., 1 Dodd Ter., Verona, NJ 07044. UERMMMC (Philippines) 1974. Board eligible. Also, immunology. Solo, partnership, group. Available.

ANESTHESIOLOGY—P. Poovendran, M.D., Box 35, Westchester County Medical Center, Valhalla, NY 10595. Ceylon (Sri-Lanka) 1974. Board eligible. Group or partnership. Available June 1985.

CARDIOLOGY—John T. Cardone, M.D., 1035 Southern Artery, Apt. 707, Quincy, MA 02169. SUNY-Buffalo 1980. Board certified. Partnership or group. Available July 1985.

FAMILY MEDICINE—Alena Bilek, M.D., 2600 Netherland Ave., Apt. 2808, Bronx, NY 10463. Charles (Czechoslovakia) 1970. Group or partnership. Available July 1985.

Francis C. Imbarrato, M.D., 505 Hawthorne Ave., Williamsport, PA 17701. Guadalajara 1981. Board eligible. Solo, associate, partnership, group, HMO. Available July 1986.

GASTROENTEROLOGY—James D. Kutch, M.D., 323 Obispo Ave., #207, Long Beach, CA 90814. UMDNJ 1979. Board eligible. Board certified (IM). Group or partnership. Available July 1985.

HEMATOLOGY—Hoon Park, M.D., 112 W. 65 St., Apt. 3, Westmont, IL 60559. Kyung Hee (Korea) 1973. Board certified (IM). Also, internal medicine. Solo, group, partnership, institution. Available July 1985.

IMMUNOLOGY—Narciso P. Mendoza, M.D., 1 Dodd Ter., Verona, NJ 07044. UERMMMC (Philippines) 1974. Board eligible (AL). Also, allergy. Solo, partnership, group. Available.

INTERNAL MEDICINE—Kurt N. Bausback, M.D., 415 S. Van Pelt St., Apt. D-4, Philadelphia, PA 19146. Stanford 1982. Board eligible. Group, multispecialty, hospital, emergency center. Available July 1985.

John T. Cardone, M.D., 1035 Southern Artery, Apt. 707, Quincy, MA 02169. SUNY-Buffalo 1980. Board certified. Also, cardiology. Partnership or group. Available.

Maria Del Vecchio, M.D., 30 Rosewood Ter., Bloomfield, NJ 07003. UMDNJ 1981. Board eligible. Salaried, part-time (approx. 20 hours/week). Available.

Kathleen A. Giaoni, M.D., 8 Park Dr. West, West Orange, NJ 07052. UMDNJ 1982. Board eligible. Solo. Available July 1985.

Mohamed Khan, M.D., 1056 Woods La., Grosse Pointe Woods, MI 48236. King Edward (Pakistan) 1966. Board eligible. Group or solo. Available.

Bharat Kumar Mehta, M.D., Lafayette Hills Apts., #2C, Easton, PA 18042. MGM (India) 1978. Board eligible. Group or partnership. Available July 1985.

Hoon Park, M.D., 112 W. 65 St., Apt. 3, Westmont, IL 60559. Kyung Hee (Korea) 1973. Board certified. Subspecialty, hematology. Solo, group, partnership, institution. Available July 1985.

Jason Weiner, M.D., 10 Dwight St., Poughkeepsie, NY 12601. Guadalajara 1980. Board eligible. Group or partnership. Available.

Joseph M. Weisgras, M.D., 160 West End Ave., Apt. 14E, New York, NY 10023. Juarez 1981. Board eligible. Group, partnership, associate, solo. Available.

OBSTETRICS/GYNECOLOGY—Ian J. Gluck, M.D., 269-03R Grand Central Pkwy., Floral Park, NY 11005. New York Medical College 1979. Board eligible. Group or partnership. Available July 1985.

Karen S. Juske, M.D., 21 W. 276 Crescent Blvd., Glen Ellyn, IL 60137. Stritch-Loyola 1977. Board certified. Group, HMO, family planning clinic. Available.

ORTHOPEDICS—Andrew R. Goldstein, M.D., 27 High St., Apt. 3E, Orange, NJ. UMDNJ 1980. Board eligible. Group or partnership. Available July 1985.

OTOLARYNGOLOGY—Leonid E. Super, M.D., 1910 59th St., Brooklyn, NY 11204. Chernovey (USSR) 1952. Group, partnership, HMO. Available.

PATHOLOGY—Joseph W. Depenbusch, M.D., University of Wisconsin Hospital, 600 Highland Ave., Madison, WI 53792. Iowa 1981. Board eligible. Available July 1985.

Yury Kogan, M.D., 60 Egmont St., Brookline, MA 02146. Second Moscow Medical Institute 1967. Board certified. Group or partnership. Available.

PEDIATRICS—Noah Barysh, M.D., 603A Old Nassau Rd., Jamesburg, NJ 08831. Chicago 1933. Board certified. Part time, 15 hrs/wk. Available.

Kirti Vora, M.D., 41 E. White Ter., Nutley, NJ 07110. Baroda (India) 1975. Board certified. Group, partnership, staff position. Available.

PHYSICAL MEDICINE/REHABILITATION—Minaxi Vora, M.D., 41 E. White Ter., Nutley, NJ 07001. M.P. Shah (India) 1975. Group, partnership, solo, staff position. Available.

RADIOLOGY—Neil R. Kramer, M.D., 1000 Walnut St., Philadelphia, PA 19107. Temple 1980. Board eligible. Group or partnership. Available July 1985.

Martin J. Lachman, M.D., 4040 Ford Rd., Philadelphia, PA 19131. Temple 1966. Board certified. Group, partnership, hospital. Available.

Richard Steinberg, M.D., 3701 Lindell Blvd., St. Louis, MO 63108. SUNY-Downstate 1980. Board eligible. Hospital-based or group-based practice with emphasis on CT and ultrasound. Available July 1985.

SURGERY—Nicholas G. Bonuicino, M.D., 130 W. 12 St., Apt. 5J, New York, NY 10011. New York Medical College 1979. Board eligible. Partnership or group. Available May 1985.

Naresh C. Nagpal, M.D., 323A Hayden St., Sayre, PA 18840. Maulana Azad (India) 1974. Board eligible. Solo, partnership, group. Available July 1985.

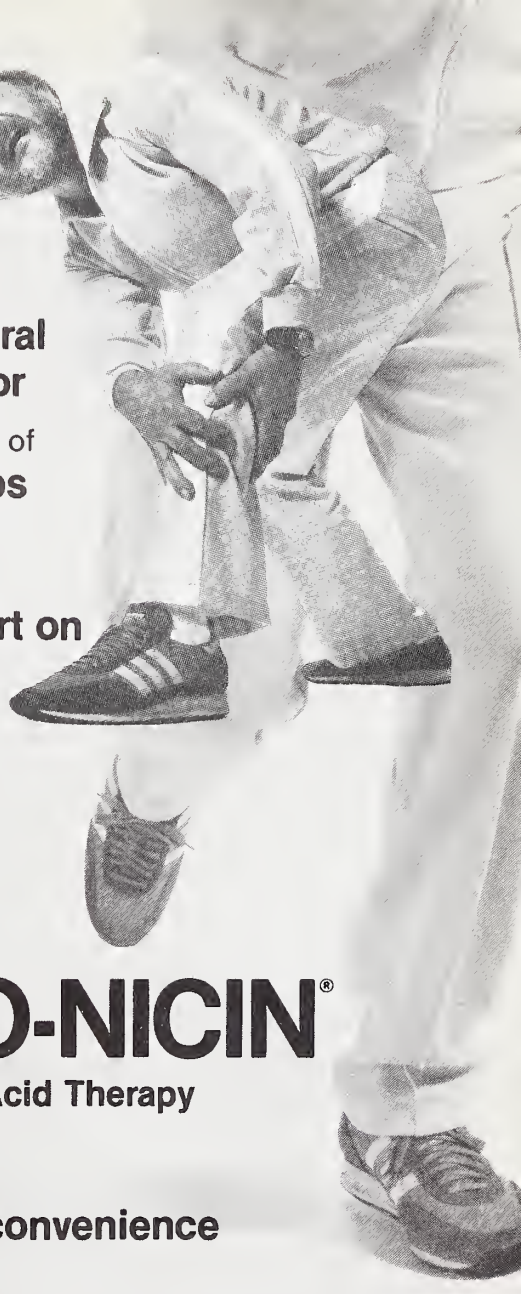
P.K. Sharma, M.D., 347 Vomel Dr., New Milford, NJ 07646. KGMC (India) 1973. Group or partnership. Available.

UROLOGY—Michael Bruce Kline, M.D., 3227 Jefferson Ave., #5, Cincinnati, OH 45220. Cincinnati 1980. Board eligible. Partnership or solo. Available August 1985.

Ned R. Novsam, M.D., 8300 Sawyer Brown Rd., E-306, Nashville, TN 37221. Boston 1974. Board eligible. Partnership or group. Available July 1986.

Bharat R. Shah, M.D., 2610 Michaels Dr., Temple, TX 76502. BJ Medical (India) 1968. Board eligible. Solo, group, partnership, multispecialty, academic. Available.

Binod Sinha, M.D., 3425 Golf View Dr., #105, Eageri, MN 55123. Prince of Wales 1976. Group, partnership, solo. Available July 1985.



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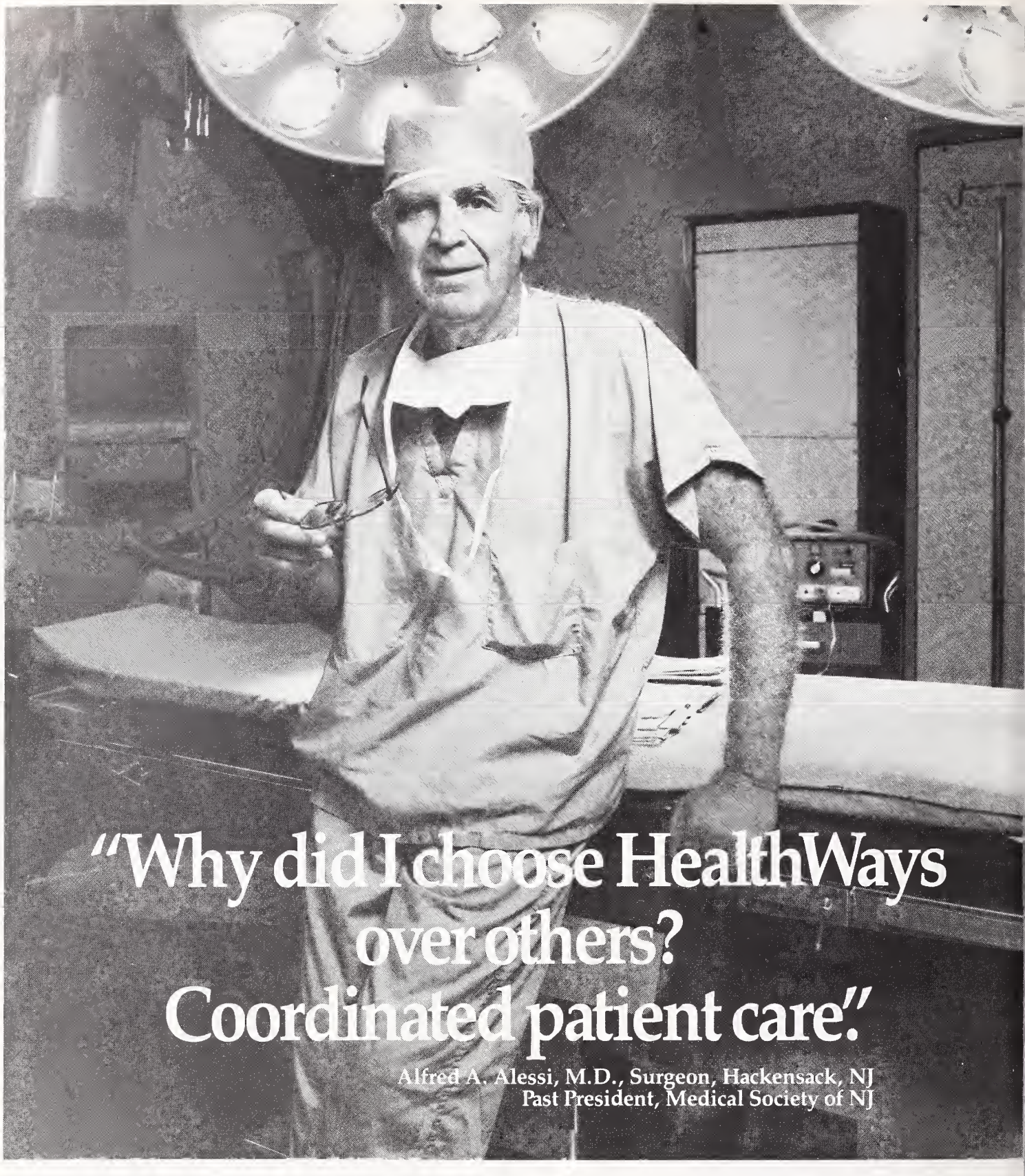
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HOUSING APPLICATION

219TH ANNUAL MEETING
MEDICAL SOCIETY OF NEW JERSEY
THURSDAY, MAY 2, TO SUNDAY, MAY 5, 1985

HE FOLLOWING ARE ALL-INCLUSIVE PACKAGE PLANS BASED ON IODIFIED AMERICAN PLAN, INCLUDING DINNER AND BREAKFAST AILY STARTING WITH DINNER ON THE DAY OF ARRIVAL, THE SAT-RDAY NIGHT BANQUET, LIVE CABARET SHOWS EACH EVENING EATURING A DIFFERENT SHOW EVERY NIGHT, STATE SALES TAX, ND ALL GRATUITIES COVERING BELLMEN FOR IN/OUT LUGGAGE ERVICE, CHAMBERMAIDS, AND ALL MEAL SERVICE AS OUTLINED:

OUR-NIGHT PACKAGE
435.00 PER PERSON, SINGLE OCCUPANCY
324.00 PER PERSON, DOUBLE OCCUPANCY
120.00 PER CHILD SHARING A ROOM WITH PARENTS

HREE-NIGHT PACKAGE
337.00 PER PERSON, SINGLE OCCUPANCY
251.00 PER PERSON, DOUBLE OCCUPANCY
90.00 PER CHILD SHARING A ROOM WITH PARENTS

WO-NIGHT PACKAGE
238.00 PER PERSON, SINGLE OCCUPANCY
177.00 PER PERSON, DOUBLE OCCUPANCY
60.00 PER CHILD SHARING A ROOM WITH PARENTS

- **Forms received after April 1, 1985, will be confirmed on an "if available" basis.**
- **Fill out only one form for each room required.**
- **DEPOSIT OF $100 PER ROOM MUST ACCOMPANY FORM TO CONFIRM RESERVATIONS.**
- **Please make check payable to HOST FARM. Major credit cards accepted at hotel, but not for deposit.**
- **Hotel confirmation is required for check-in.**
- **Send form and deposit to:**
  Host Reservations
  2300 Lincoln Highway East
  Lancaster, PA 17602
  717-299-5500

HECK TYPE OF ROOM REQUIRED: ☐ **SINGLE OCCUPANCY** ☐ **DOUBLE OCCUPANCY**
☐ **WILL BE SHARING ROOM****

*The hotel will not be responsible for assigning roommates. Unless roommate is stated, you will be assigned a single occupancy accommodation.

LEASE PRINT OR TYPE THE FOLLOWING INFORMATION:

AME: _____ NO. of CHILDREN: _____

OOMMATES: _____ CHILDREN'S AGES: _____

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DDRESS: _____

TY: _____

HONE: _____ STATE: _____ ZIP: _____

HECK IF OFFICIAL DELEGATE ☐ COUNTY: _____

RRIVAL DATE _____ DAY _____

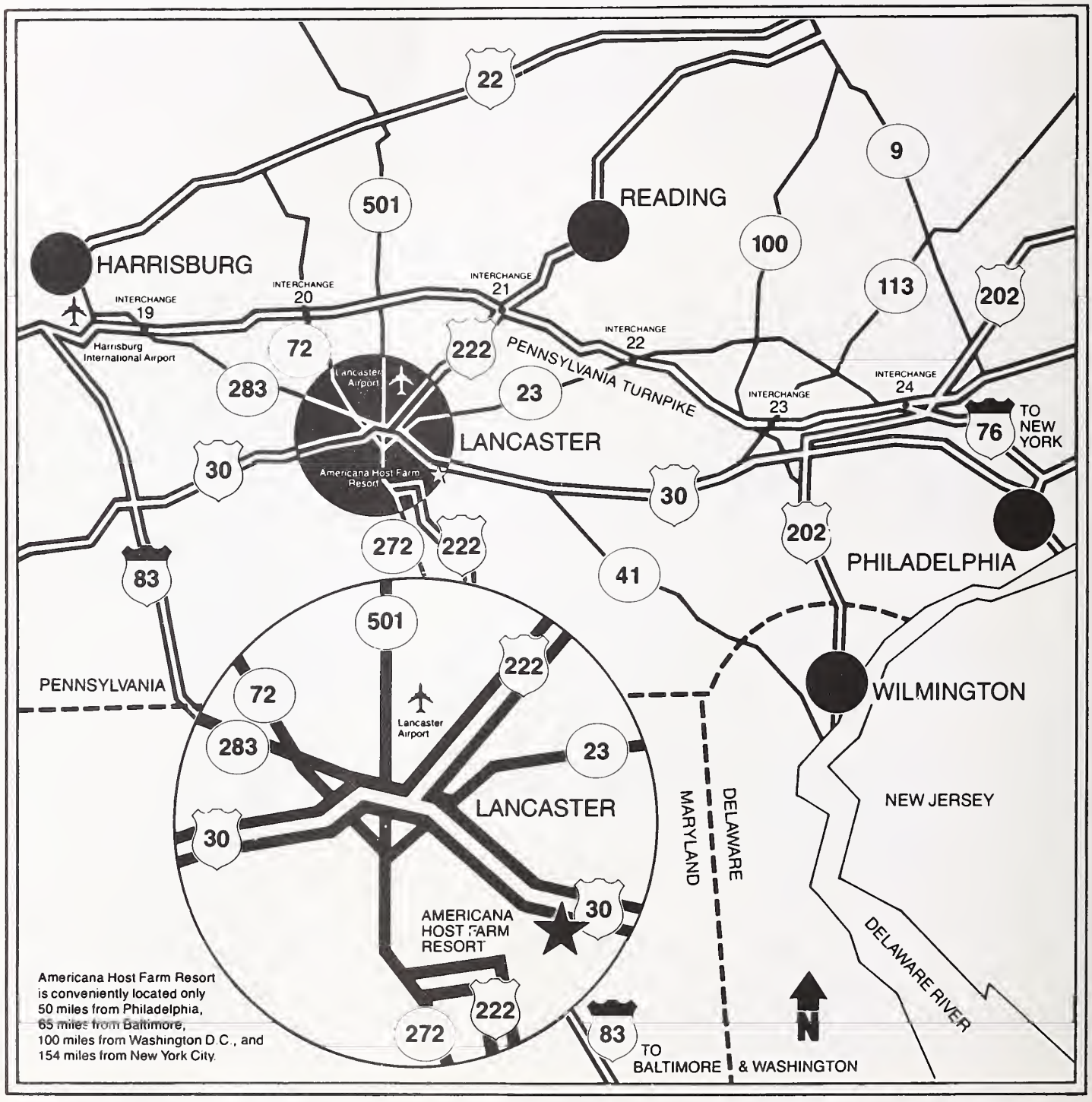
EPARTURE DATE _____ DAY _____

CHECK-IN: AFTER 4 PM
CHECK-OUT: BY 12 NOON

MEDICAL SOCIETY OF NEW JERSEY—219TH ANNUAL MEETING #2220

Americana
Host Farm Resort

2300 Lincoln Highway East (Route 30), Lancaster, Pennsylvania 17602 (717) 299-5500



FROM NEW YORK
Take New Jersey Turnpike South to Pa. Turnpike. Take Pa Turnpike West to Interchange No. 21. Travel South on U.S. Rte. 222 to U.S. Route 30. Travel East on U.S. Route 30, approximately 5 miles to Americana Host Farm Resort.

FROM PITTSBURGH & POINTS WEST
Travel East on Pa. Turnpike to Int. 19. Go South on I-283 for 30 miles into Route 30 East for 6 miles to Americana Host Farm Resort.

FROM PHILADELPHIA
Take Pa. Turnpike West to Interchange No. 21. Travel South on U.S. Rte. 222 to U.S. Route 30. Travel East on U.S. Route 30, approximately 5 miles to Americana Host Farm Resort.

FROM BALTIMORE & WASHINGTON
Go North on Interstate Route 83 to York, Pa. Turn East on U.S. Route 30 for 32 miles to Americana Host Farm Resort.

BY AIR
Harrisburg International Airport (just 35 minutes from Host by limousine or car) via TWA and U.S. Air, and Lancaster Airport only minutes away with daily flights via U.S. Air.

BY RAILROAD
Amtrak to Lancaster Station. Taxi and Rent-a-Car Service available.

THE MEDICAL FAMILY
ITS STRENGTHS, ITS WEAKNESSES AND INSURING ITS SURVIVAL

Sunday, March 24, 1985
9:30 a.m.

The Impaired Physicians Program and the Auxiliaries to the Medical Society of New Jersey and the New Jersey Association of Osteopathic Physicians and Surgeons invite you and your spouse to attend this day of enlightenment. Topics to be addressed include:

THE PHYSICIAN'S FAMILY—STRENGTHS AND WEAKNESSES

THE IMPAIRED PHYSICIAN

THE IMPAIRED PHYSICIAN'S FAMILY AND FAMILY THERAPY

THE EMOTIONAL IMPACT OF A MALPRACTICE SUIT ON THE PHYSICIAN AND THE PHYSICIAN'S FAMILY

GEARING UP FOR RETIREMENT

THE PHYSICIAN AND THE PHYSICIAN'S FAMILY—SURVIVAL AND SOLUTIONS

GUEST SPEAKERS
M.O. Vincent, M.D., Ontario, Canada
Sara Charles, M.D., University of Illinois
Frank C. Snope, M.D., Piscataway, New Jersey

Approved for 3.5 Category 1 CME Credits

REGISTRATION FORM
THE MEDICAL FAMILY

Please print

Name(s) of those to attend

Address

Telephone

[ ] Enclosed is my check for $15. This will cover my registration only.
[ ] Enclosed is my check for $25. My spouse will accompany me.

YOUR REGISTRATION FEE INCLUDES LUNCHEON FOLLOWING THE SEMINAR!

PLEASE COMPLETE AND RETURN YOUR REGISTRATION FORM AS SOON AS POSSIBLE. SPACE IS LIMITED!!!

Return to: **Impaired Physicians Program**
c/o Medical Society of New Jersey
2 Princess Road
Lawrenceville, New Jersey 08648

LIKOFF CARDIOVASCULAR INSTITUTE

of Hahnemann Medical College & Hospital

230 N. Broad Street, Philadelphia, Pennsylvania 19102 (215) 448-8063

CARDIOLOGY UPDATE. . .

IS DESIGNED FOR THE PHYSICIAN AND PROVIDES AN INTENSIVE SURVEY OF THE CURRENT STATUS OF CLINICAL CARDIOLOGY. . .

WEDNESDAY, APRIL 3, 1985

ACUTE MYOCARDIAL INFARCTION

MODERATOR: LEONARD N. HOROWITZ, M.D.

3:00 CASE PRESENTATION — *Steven J. Mattleman, M.D.*

3:30 CLINICAL FINDINGS IN UNCOMPLICATED AND COMPLICATED MYOCARDIAL INFARCTION — *William S. Frankl, M.D.*

4:00 THE ELECTROCARDIOGRAPHIC DIAGNOSIS OF ACUTE MYOCARDIAL INFARCTION — *Gary J. Anderson, M.D.*

4:30 THE MANAGEMENT OF THE PATIENT WITH ACUTE MYOCARDIAL INFARCTION AND CARDIAC FAILURE — *Mariell J. Likoff, M.D.*

5:00 MANAGEMENT OF VENTRICULAR ARRHYTHMIAS IN PATIENTS WITH ACUTE MYOCARDIAL INFARCTION — *Leonard N. Horowitz, M.D.*

LECTURE HALL "A"—2nd floor New College Building, Hahnemann University
15th and Vine Streets, Philadelphia, PA

• NO REGISTRATION FEE • NO ADVANCE REGISTRATION REQUIRED •
• CME CATEGORY I CREDITS CERTIFIED •
WINE & CHEESE SERVED FOLLOWING CONFERENCE



THE INTERSPECIALTY FACIAL SURGERY CONGRESS
FOR
AESTHETIC, CANCER AND RECONSTRUCTIVE SURGERY

APRIL 24–27, 1985
NEW YORK, NEW YORK

The Waldorf=Astoria

APRIL						
S	M	T	W	T	F	S
	1	2	3	4	5	6
7	8	9	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28	29	30				

PROGRAM CHAIRMEN

OCULOPLASTIC SURGERY
PIERRE GUIBOR, M.D.

PLASTIC SURGERY
RICHARD COBURN, M.D.

DERMATOLOGIC SURGERY
MICHAEL ALBOM, M.D.

OTOLARYNGOLOGIC/FACIAL SURGERY
NORMAN PASTOREK, M.D.

ORAL/MAXILLOFACIAL SURGERY
STANLEY BEHRMAN, D.M.D.

FEATURED GUEST SPEAKERS

Ophthalmology ★	ALSTON CALLAHAN, M.D.	★ Birmingham
Plastic Surgery ★	THOMAS CASEY, M.D.	★ London, England
	IAN McGREGOR, M.D.	★ Glasgow, Scotland
	RICHARD WEBSTER, M.D.	★ Brookline
Dermatology ★	NORMAN ORENTREICH, M.D.	★ New York
	SAMUEL STEGMAN, M.D.	★ San Francisco
	THEODORE TROMOVITCH, M.D.	★ San Francisco
Otolaryngology ★	WALTER BERMAN, M.D.	★ Beverly Hills
	JOHN CONLEY, M.D.	★ New York
	EUGENE TARDY, M.D.	★ Chicago
Oral Surgery ★	BRUCE DONOFF, D.M.D., M.D.	★ Boston

TOPICS

FACIAL CANCER SURGERY

FACIAL TRAUMA SURGERY

FACIAL AESTHETIC SURGERY

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☐ OTHER (Specify_____)

REGISTRATION FEE:
$395 BEFORE 3/1/85
$450 AFTER 3/1/85
*$250 RESIDENT'S FEE
*with documentation—no food functions included

Make Check Payable to INTERSPECIALTY CONGRESS

WALDORF-ASTORIA—REGISTRATION FORM

★ Arrival Date	Departure Date	# Nights	Check Out 1:00 p.m.

★ Registration—Wednesday, 4/24/85—6-8 p.m.

☐ Single	$120	$135	$145 (Circle One)
☐ Double	$150	$170	$180
☐ Suites	$320 & up (parlor & 1 bedroom)		
	$460 & up (parlor & 2 bedrooms)		

Make Check Payable To: Waldorf-Astoria Hotel

ONE NIGHT DEPOSIT MUST ACCOMPANY RESERVATION

CME CALENDAR

The following is a list of continuing medical education courses for the next two months. Contact the sponsoring organization for further information.

This list is compiled through the cooperation of the Committee on Medical Education of the Medical Society of New Jersey, The Academy of Medicine of New Jersey, the New Jersey Chapter of the American Academy of Family Physicians, and the Office of Continuing Medical Education of the UMDNJ. For information on accreditation, please contact the sponsoring organization(s), indicated by italics—last line of each item.

CARDIOLOGY

Apr.

24 **New Era in Diagnosis and Treatment of Coronary Heart Disease**
12 noon-4:30 P.M.—Sheraton Fairfield Hotel
(NJ Affiliate and Metropolitan Chapter, American Heart Association and AMNJ)

May

21 **Treatment of Chronic Refractory Heart Failures**
12 noon—St. Mary's Hospital, Orange
(AMNJ)

MEDICINE

Apr.

2 **Advances in Allergy and Immunology**
8:30-1:30 P.M.—Holy Name Hospital, Teaneck
(Holy Name Hospital and AMNJ)

3 **Insulin Resistance in Diabetes Mellitus**
7-10 P.M.—Hyatt Regency Hotel, New Brunswick
(American Diabetes Association, NJ Affiliate, and AMNJ)

3 **Internal Medicine Review Course**
10 3-6 P.M.—Overlook Hospital,
17 Summit
24 *(Overlook Hospital and AMNJ)*

3 **Endocrine Conferences**
10 3:30-5 P.M.—Rotates between
17 Newark Beth Israel Medical Center,
24 University Hospital, and United Hospitals Medical Center, Newark, and VA Medical Center, E. Orange
(Endocrinology Section, AMNJ)

4 **Immunoregulation: Basic**
11 **Concepts and Applications**
18 4-6 P.M.—Institute for Medical
25 Research, Copewood St., Camden
(Institute for Medical Research and AMNJ)

4 **Nephrology Grand Rounds**
6:30-7:30 P.M.—Dialysis Unit, Community Memorial Hospital, Toms River
(Community Memorial Hospital and AMNJ)

4 **Distinguished Lecture Series**
11 A.M.-12 noon—St. Joseph's Hospital and Medical Center, Paterson
(St. Joseph's Hospital and Medical Center and AMNJ)

5 **Renal Conferences in Nephrology**
19 4-5 P.M.—Medical Education Bldg., Rm. 393, Rutgers Medical School
(UMDNJ and AMNJ)

9 **Dermatological Conference**
8-10 P.M.—Schering Corporation, Kenilworth
(NJ Dermatological Society and AMNJ)

Distinguished Lecture Series
11 **Staph Endocarditis**
18 **Inflammatory Arthritis and Therapy**
11 A.M.-12 noon—St. Joseph's Hospital and Medical Center, Paterson
(St. Joseph's Hospital and Medical Center and AMNJ)

12 **Antibiotic Therapy: 1985**
8 A.M.-12 noon—Overlook Hospital, Summit
(Overlook Hospital and AMNJ)

16 **What Have We Learned from 24-Hour Blood Pressure Monitoring?**
12 noon—St. Mary's Hospital, Orange
(AMNJ)

17 **Dermatological Conference**
6-9 P.M.—Rutgers Community Health Plan, 57 U.S. Hwy. 1, New Brunswick
(UMDNJ-Rutgers Medical School and AMNJ)

18 **New Strategies in Confronting the Cigarette Experience**
5-7:30 P.M.—Somerset Medical Center, Somerville
(Somerset Medical Center and AMNJ)

24 **State of the Art in Cancer Management**
1:30-4:30 P.M.—Mayfair Farms, West Orange
(Essex County Unit, American Cancer Society and AMNJ)

25 **Roving Symposium—Radiation Therapy**
11 A.M.-12 noon—St. Joseph's Hospital and Medical Center, Paterson
(St. Joseph's Hospital and Medical Center and AMNJ)

May

1 **Substance Abuse**
8:30 A.M.-1 P.M.—Alexian Brothers Hospital, Elizabeth
(AMNJ)

1 **Internal Medicine Review Course**
8 3-6 P.M.—Overlook Hospital,
15 Summit
22 *(Overlook Hospital and AMNJ)*
29

1 **Endocrine Conferences**
8 3:30-5 P.M.—Rotates between
15 Newark Beth Israel Medical Center,
22 University Hospital, and United
29 Hospitals Medical Center, Newark, VA Medical Center, East Orange
(Endocrinology Section, AMNJ)

2 **Immunoregulation: Basic Concepts and Applications**
4-6 P.M.—Institute for Medical Research, Copewood St., Camden
(Institute for Medical Research and AMNJ)

2 **Nephrology Grand Rounds**
6:30-7:30 P.M.—Dialysis Unit, Community Memorial Hospital, Toms River
(Community Memorial Hospital and AMNJ)

2 **Distinguished Lecture Series—Parkinson's Disease**
11 A.M.-12 noon—St. Joseph's Hospital and Medical Center, Paterson
(St. Joseph's Hospital and Medical Center and AMNJ)

3 **Renal Conferences in Nephrology**
17 4-5 P.M.—Rutgers Medical School, Medical Education Bldg., Rm. 393
(Nephrology Society of NJ and AMNJ)

8 **Cutaneous Signs of Internal Disease**
1:30 P.M.—Essex County Hospital Center, Cedar Grove
(AMNJ)

9 **Stress and Disease**
11 A.M.-12 noon—St. Joseph's Hospital and Medical Center, Paterson
(St. Joseph's Hospital and Medical Center and AMNJ)

15 **Dermatological Conference**
6-9 P.M.—Rutgers Community Health Plan, 57 U.S. Hwy. 1, New Brunswick
(UMDNJ and AMNJ)

16 **Medical and Psychiatric Aspects of Drug and Alcohol Abuse**
2 P.M.—John E. Runnells Hospital, Berkeley Heights
(AMNJ)

16 **New Concepts in Antifibrinolytic Therapy**
5-7:30 P.M.—Somerset Medical Center, Somerville
(Somerset Medical Center and AMNJ)

June 15, 1985

5TH ANNUAL ADVANCES IN GASTROENTEROLOGY

Golden Nugget Hotel
Atlantic City, New Jersey

Sponsored by the Gastrointestinal Section of the Hospital of the University of Pennsylvania and the Continuing Medical Education Department of the Underwood Memorial Hospital, Woodbury, New Jersey.

Category 1 credit offered.

Information: Registration Supervisor, Slack Incorporated, 6900 Grove Road, Thorofare, New Jersey 08086, 609-848-1000.

SPECIAL MEETING ANNOUNCEMENT

ALCOHOL AND DRUG ADDICTION IN DOCTORS DIAGNOSIS AND TREATMENT

APRIL 11, 1985 till noon on APRIL 15, 1985

Place: GOVERNOR MORRIS INN, Morristown, NJ 07960

April 11, 1985 will include a special program providing 6 CMS credit hours which is entitled: RECENT ADVANCES IN ALCOHOLISM & THE NEW JERSEY IMPAIRED PHYSICIANS PROGRAM.

April 12-15 will be an AA Recovery Program Attendance Limited to Physicians who have or may have a problem with Alcohol and/or Drugs. PERSONAL ANONYMITY WILL BE PRESERVED.

Sponsored by the N.J. Professional group in A.A.

For further information, write to:
Secretary, 86 Miller Road, Morristown, N.J. 07960

SYMPOSIUM ON CURRENT TECHNIQUES IN EYELID AND LACRIMAL SURGERY, April 27, 1985.

The University of Medicine and Dentistry of New Jersey—New Jersey Medical School, Christine Zolli, M.D., Program Director, Registration information can be obtained from the UMDNJ-Continuing Education, 100 Bergen Street, Newark, NJ (201) 456-4267.

Jefferson Medical College of Thomas Jefferson University

presents

3RD ANNUAL UPDATE IN INTERNAL MEDICINE

May 8-9-10, 1985
at
Solis Cohen Auditorium
Jefferson Alumni Hall

A two and one-half day intensive symposium sponsored by the Department of Medicine, at Jefferson Medical College, 1025 Walnut Street, Philadelphia, Pennsylvania

ACME approved: 17 credit hours in Category 1
Willis C. Maddrey, M.D.—Program Director
John H. Martin, M.D.—Associate Director

A registration fee of $350.00 includes course syllabus, continential breakfast, coffee breaks, luncheons and a reception.

For information and registration call:
The Office of Continuing Medical Education at
(215) 928-6992

THE NEW YORK HOSPITAL-CORNELL MEDICAL CENTER

June 10-14, 1985

Update Your Medicine 1985. Association of Practicing Physicians of The New York Hospital and Cornell University Medical College. 37 hours Category I credit, 42 if both optional workshops are taken. 9 major review lectures, 16 workshops, 2 Meet the Professor luncheons, Grand Rounds and optional practical workshops in breast/pelvic and male genitorectal examinations. Held at New York Hospital-Cornell, 1300 York Avenue at 69th Street, New York.

Information: Office of CME, 212-472-6119 or 5600. Dr. Lila Wallis, Course Director.

Also, call us for information about Update Your Medicine, Ithaca course July 22-26, 1985.

1985 CME CRUISE/CONFERENCES ON SELECTED MEDICAL TOPICS

Caribbean, Mexican, Hawaiian, Alaskan, Mediterranean. 7-14 days year-round. Approved for 20-24 CME Cat. 1 credits (AMA/PRA) & AAFP prescribed credit. Distinguished professors. FLY ROUNDTRIP FREE ON CARIBBEAN, MEXICAN, & ALASKAN CRUISES. Execellent group fares on finest ships. Registration limited. Pre-scheduled in compliance with present IRS requirements.

Information: International Conferences, 189 Lodge Ave., Huntington Station, N.Y. 11746. (516) 549-0869.

NEUROLOGY/PSYCHIATRY

Apr.

2 **Role of Lithium in Child Psychiatry**
8:30-10:30 P.M.—Ramada Inn, Clark
(NJ Council of Child and Adolescent Psychiatry and AMNJ)

4 **Case Seminars**
18 8-10 P.M.—310 Harding Drive, South Orange
(Advanced Psychiatric Study Group and AMNJ)

4 **Clinical Impact of Doctor/Patient Relationship**

11 **Telling the Truth to Patients—Is This Good Medicine?**

18 **Cognitive Therapy in Adolescents**
12 noon-1 P.M.—Carrier Foundation, Belle Mead
(Carrier Foundation)

15 **Lecture Series**
8:30-10:30 P.M.—301 Broad Ave., Englewood
(NJ Psychoanalytic Society and AMNJ)

16-17 **Electroconvulsive Therapy: Current Practice and Efficacy**
9 A.M.-5 P.M.—Carrier Foundation, Belle Mead
(Carrier Foundation)

17 **Cult Update**
8 A.M.-4:30 P.M.—Englewood Hospital
(AMNJ)

18 **Coordination of Psychiatric Treatment in the Hospital and Community**
3 P.M.—Ancora Psychiatric Hospital, Hammonton
(AMNJ)

20 **Phobias and Panic Disorders**
9 A.M.-3:30 P.M.—Middlesex General-University Hospital, New Brunswick
(New Jersey Psychoanalytic Society and AMNJ)

May

2 **Psychoimmunology—The New Frontier**

9 **Prescribing for Geriatric Patients**

16 **Creative Therapy for Adolescents and Geriatrics**

30 **New Brain Imaging Techniques and Clinical Psychiatry**
12 noon-1 P.M.—Carrier Foundation, Belle Mead
(Carrier Foundation)

2 **Case Seminars**
16 8-10 P.M.—310 Harding Drive, South Orange
(Advanced Psychiatric Study Group and AMNJ)

6 **Anorexia Nervosa with Unusual Ideology**
8:15-10:30 P.M.—5 Fairfield Street, Montclair
(Essex Psychiatric Seminar and AMNJ)

10-17-24 **Centralized Residency Training Program and Psychiatric Lecture Series**
1:30-5 P.M.—Trenton Psychiatric Hospital
(Division of Mental Health, Trenton Psychiatric Hospital, and AMNJ)

20 **Lecture Series**
8:30-10:30 P.M.—301 Broad Ave., Englewood
(NJ Psychoanalytic Society and AMNJ)

22 **Family Therapy and the Schizophrenic Patient**
9 A.M.-5 P.M.—Carrier Foundation, Belle Mead
(Carrier Foundation)

PATHOLOGY

May

10 **Pulmonary Pathology in the Newborn**
8-9:30 A.M.—Overlook Hospital, Summit
(Overlook Hospital and AMNJ)

18 **Monoclonal Antibody Use in Diagnoses of Infectious Disease**
8:30 A.M.-2 P.M.—Rutgers Medical School, Piscataway
NJ Society of Pathologists and AMNJ)

PEDIATRICS

May

14 **Advanced Concepts in Neonatology/Perinatology**
6:30-7:45 P.M.—NJ Medical School, Newark
(UMDNJ)

RADIOLOGY

Apr.

16 **Topic To Be Announced**
7:30-10 P.M.—Saint Barnabas Medical Center, Livingston
(NJ Institute of Ultrasound in Medicine and AMNJ)

18 **Oncology: Current Radiation and Therapy**
11 A.M.—St. Joseph's Hospital and Medical Center, Paterson
(St. Joseph's Hospital and Medical Center and AMNJ)

18 **Radiology Meeting**
7:30 P.M.—Saint Barnabas Medical Center, Livingston
(Radiological Society of NJ and Radiology Section and AMNJ)

20-21 **Basic M-Mode Echocardiography for Physicians and Technologists**
9 A.M.-5 P.M.—The Center for Health Affairs, Princeton
(The National Foundation for Non-invasive Diagnostics and AMNJ)

25 **Visiting Professorship Program**
1:30-5 P.M.—Saint Barnabas Medical Center, Livingston
(Saint Barnabas Medical Center and AMNJ)

May

23 **Visiting Professorship Program**
1:30-5 P.M.—Saint Barnabas Medical Center, Livingston
(Saint Barnabas Medical Center and AMNJ)

Daily Schedule
219th Annual Meeting

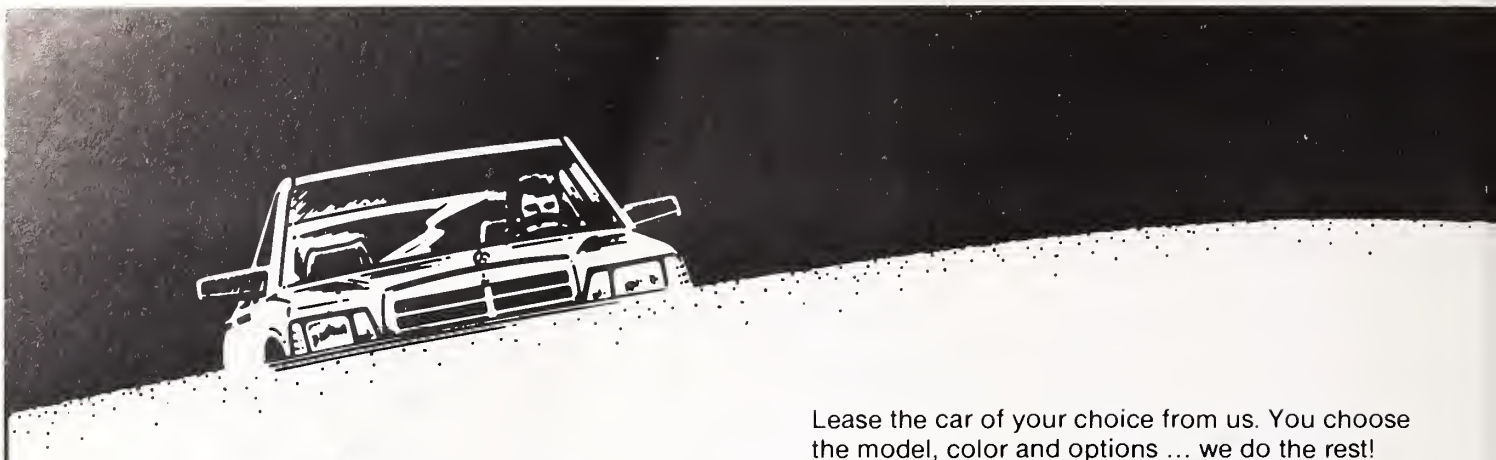
May 2-5, 1985
Americana Host Farm Resort
Lancaster, Pennsylvania

Thursday, May 2, 1985
9:00 A.M.—Registration Opens
9:00 A.M.—Message Center Opens
2:00 P.M.—House of Delegates
4:00 P.M.—Reference Committees (Three Reference Committee Meetings)

Friday, May 3, 1985
7:30 A.M.—Registration Opens
9:00 A.M.—House of Delegates (election)
9:00 A.M.—Message Center and Exhibits Open
12:00 NOON—Golden Merit Award Ceremony Followed by Reception
2:30 P.M.—Reference Committees (Three Reference Committee Meetings)
5:00 P.M.—JEMPAC Political Forum
5:45 P.M.—JEMPAC Wine and Cheese Reception

Saturday, May 4, 1985
8:00 A.M.—Registration Opens
8:30 A.M.—House of Delegates
9:00 A.M.—Message Center and Exhibits Open
1:30 P.M.—House of Delegates
6:30 P.M.—Inaugural Reception followed by Inaugural Dinner

Sunday, May 5, 1985
8:00 A.M.—Registration Opens
9:00 A.M.—Message Center and Exhibits Open
9:00 A.M.—Program of Major Interest to Physicians
12 NOON—Luncheons and Board of Trustees' Meeting



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SURGERY

Apr.

2 **Surgical Grand Rounds**
16 7-9 A.M.—Hackensack Medical
30 Center
(Hackensack Medical Center and AMNJ)

23 **Use of Laser in the GI Tract**
8-10 P.M.—Englewood Club, Englewood
(Englewood Surgical Society and AMNJ)

May

14 **Surgical Grand Rounds**
7-9 A.M.—Hackensack Medical Center
(Hackensack Medical Center and AMNJ)

28 **Surgical Oncology Update**
8-10 P.M.—Englewood Club, Englewood
(Englewood Surgical Society and AMNJ)

SURGICAL SPECIALTIES

Apr.

4 **Vascular Surgical Rounds**
11 4-5 P.M.—Medical Education Bldg.,
18 Rm. 593, Rutgers Medical School
25 *(UMDNJ)*

12 **10th Annual NJ Orthopaedic**
13 **Symposium**
UMDNJ-Rutgers Medical School
(NJ Orthopaedic Society and AMNJ)

18 **Orthopedic Problems: Nonoperative Management of Chronic Back Pain**
2 P.M.—John E. Runnells Hospital, Berkeley Heights
(AMNJ)

27 **Current Techniques in Eyelid and Lacrimal Surgery**
8 A.M.-4 P.M.—NJ Medical School, Newark
(UMDNJ and AMNJ)

May

2 **Vascular Surgical Rounds**
9 4-5 P.M.—Medical Education Bldg.,
16 Rm. 593, Rutgers Medical School,
23 New Brunswick
30 *(UMDNJ)*

MISCELLANEOUS

Apr.

3 **CME Workshop**
All Day—Executive Offices, MSNJ, Lawrenceville
(AHMANJ/AMNJ and MSNJ)

14 **Regional Scientific CME Meeting**
UMDNJ-New Jersey Medical School, Newark
(American College of Physicians, NJ Associates)

16 **Legal Aspects of Psychiatric Practice**
3 P.M.—Ancora Psychiatric Hospital, Hammonton
(AMNJ)

The *Journal* of the Medical Society of New Jersey
announces the reprinting of the

WILLIAM CARLOS WILLIAMS COMMEMORATIVE ISSUE

September, 1983

Honoring the 100th anniversary of the birth of New Jersey's prize-winning poet and physician. Included in this handsomely illustrated, full-color issue will be original articles by persons close to William Carlos Williams, artwork from his social and intellectual circle, and samples of his finest writings.

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Adverse Reactions to Food; Basic and Clinical Immunology; Emergency Care Dynamics; Medical Disorders in Obstetric Practice; Paediatric Immunology; Practical Pediatric Imaging; Sex Talk for a Safe Child; United States Coastal Charts, 1783-1861

Adverse Reactions to Foods

National Institutes of Health, Bethesda, MD, 1984. ($9.50)

The question of how food affects us medically has gained a great deal of notoriety in recent years. Unfortunately, much of this notoriety is transmitted through the media and journalistic efforts based on anecdotal information rather than scientific fact.

This monograph, which has been long overdue, is the first concerted effort to review the entire subject of food allergy and other reactions to food, and is based entirely on scientifically controlled studies in the literature. It is a result of the efforts of the American Academy of Allergy and Immunology and sponsored by the National Institute of Allergy and Infectious Disease. Its coeditors are John Anderson, M.D., chairman of the department of pediatrics and chief of allergy at Henry Ford Hospital in Michigan, and Dorothy Sogn, M.D., who is special assistant to the director of the National Institute of Allergy and Infectious Diseases.

The first few chapters deal with the basic chemistry and physiology and immunology of food reactions. This is one of the most comprehensive reviews of this subject published. In chapter six, "Methods for Diagnosis of Adverse Reactions to Foods," we find probably the most significant chapter in the monograph since it deals quite thoroughly and critically with all the techniques used for the diagnosis of food allergy and intolerance. Their approach to this subject is objective and this chapter probably could stand alone as a worthwhile review for any physician whose patients ask or complain of such reactions.

The final sections of this superb effort is a detailed 77-page outline of all diseases thought to be related to food intake and the factors known about these reactions.

This monograph represents an outstanding review of this subject and it is an ideal reference not only for physicians who specialize in allergy and gastroenterology, but for any internist, generalist, or pediatrician who may face these problems on a daily basis.

Donald G. McKaba, M.D.

Basic and Clinical Immunology, 5th Edition

Stites, Stobo, Fudenberg, Wells (eds). Los Altos, CA, Lange Medical Publications, 1984. Pp. 803. Illustrated. ($25)

This is the third pleasant opportunity and privilege I have had to review this excellent book. As noted above, this is the fifth edition, my two previous reviews were of the third and fourth editions. The latter was reviewed in September 1982 and here is the fifth under review in October 1984. The authors state in the preface, "We intend to continue biennial editions in order to keep pace with the rapid advances in this vast field."

There are four editors, the same as in the 1982 edition; there are 67 authors, in 1982 there were 53 authors.

This is a firmly bound, softcover, well-illustrated book which is comprised of three sections and 40 chapters. The sections are basic immunology, immunologic laboratory tests, and clinical immunology. The basic question to be answered about this edition is: have we acquired that much new knowledge in this field in only two years? My answer is a strong yes. For example there is much knowledge about the various kinds of lymphocytes and how they interact. Also, there is increased knowledge about the interferon system.

The book includes an appendix which is composed of a glossary of terms commonly used in immunology and acronyms and abbreviations commonly used in immunology—a reading of these is a review of the field in itself. There also is a most complete index.

I strongly recommend this text as "must" reading for residents in pathology and internal medicine, and graduate students working in any field of immunology. It also is recommended as a reference work for all practicing physicians. As I said two years ago, "This subject represents the future of medical science and as such it must be understood by all of us." For all the material included the price of $25 is amazing.

Hugh F. Luddecke, M.D.

Emergency Care Dynamics

Steven M. Lewis and Herbert M. Weinman (eds). New York, NY, John Wiley & Sons, 1984. Pp. 420. Illustrated. ($20.95)

Being one of the first texts of its kind for the teaching of the emergency medical technician, I have been greatly impressed by the contents of *Emergency Care Dynamics.* The material includes information for those with basic and advanced training and also those designated as paramedics. I am further impressed by this book in that the greater majority of the contributors are those who have had experience as emergency medical technicians.

Fifteen contributors—biologists, psychologists, counsellors, sociologists, therapists, and physicians—have demonstrated the dramatic changes, responsibilities, and capabilities that the emergency medical technician must be aware of in this period of rapid technological and educational growth. Emergency medical technicians are expected to perform much more than the basic perfunctory tasks. To have a working knowledge and technical skills, philosophical and psychological aspects of emergency medical care will require careful study.

For the above purpose, this book has been excellently written, easily understood, and well developed with

diagrammatic and photographic illustrations and examples of situations that the emergency medical technician may encounter. The contributors have demonstrated competence in development of the required information. *Emergency Care Dynamics* should be read and readily available to every emergency medical technician and other emergency care worker. It should be used by the instructor in basic and advanced emergency medical care.

Jack R. Karel, M.D.

Medical Disorders in Obstetric Practice

Michael deSwiet, M.D., (ed). Boston, MA, Blackwell Scientific Publications, 1984. Pp. 523. Illustrated.

This text presents a well-written discussion of many of the medical problems that can occur in pregnancy. Each chapter is preceded by an outline that helps put in focus the topics to be covered. The contributors have broad clinical experience in their topic and reflect a worldwide view. Each subject is presented in a clear and concise fashion which, however, may not be referenced. One must accept on faith that there is no extra risk of incurring cancer at the injection site when receiving IM iron (as reported in rats by Richmond) as this statement is not documented.

The price you must pay for such a cosmopolitan approach is that medications used often are unfamiliar to practitioners. For example, pethidine (an opiate) and polyceline (a plasma substitute) are not widely used in the United States. Likewise, laboratory results often are quoted in mmol instead of mg%. These are minor annoyances that do not materially detract from the value of this book.

This text is recommended to practicing obstetricians and residents that appreciate a slightly different approach to medical disorders in pregnancy. G.F. Hansen, M.D.

Paediatric Immunology

Soothill, Hayward, and Wood (eds). Boston, MA, Blackwell Scientific Publications, 1983. Pp. 490. Illustrated.

The aim of this text is to relate immunology to well child care and common pediatric problems. The text is divided into three sections: immunological mechanisms, general clinical immunology, and organ-based immunology. This separation leads to concise chapters on such topics as mechanisms of adaptive immunology, immunological aspects of infant feeding in Section 1, the atopic child in Section 2, and immunological aspects of gut disease in Section 3. It also leads, however, to repetition and some inconsistency as often is seen in multiauthored texts.

I found the book to be enjoyable and helpful in learning more about immunological diseases and obtaining general information. It is easy to read but I feel *Immunological Disorders in Infants and Children* by Stiehm and Fulginiti (W.B. Saunders, 1980) is a better reference text for specific clinical entities.

I would recommend the book for the pediatrician who wants to get an overview of pediatric immunology and allergy in an easily read text. I wish, however, there were more diagrams and clinical illustrations.

Stephen F. Wang, M.D.

Practical Pediatric Imaging

Donald Kirks, M.D. Boston, MA, Little, Brown and Company, 1984. Pp. 811. Illustrated. ($95)

This is the first edition of a complete and well-written textbook, the work of one of the foremost pediatric radiologists in the country. The book is a synthesis of a review of pediatric radiology with practical information on procedures.

After the functions of Dr. Kirks's department are described, pediatric diseases are discussed by organ system. This discussion makes liberal use of high-quality radiographs, CT scans, and charts. On the whole, the chapters are very well prepared.

Practical Pediatric Imaging goes beyond just providing practical information; it is a complex text. Although I wish there were more emphasis on ultrasonography, this monograph is a very worthwhile purchase for the interested physician.

Neil B. Horner, M.D.

Sex Talk for a Safe Child

Domeena C. Renshaw, M.D. Chicago, IL, American Medical Association, 1984. Pp. 34. Illustrated. ($2, plus postage)

This illustrated booklet is a "read-aloud" text designed to be read and discussed by parents with their children. Older children may read it themselves. Its purpose is to educate the child and the reader so they may differentiate between affection and abuse. By illustrations and simple language, it talks about privacy, closeness, and the respect we all must have for each other's body. The use of handprinted letters instead of type emphasizes the low-keyed message it wishes to convey. The text teaches a child how to say no to a potential molester in or out of the family.

While it may be a sad commentary on our times that such a booklet is necessary, it is a compliment to the medical profession that one of us has faced the issue in a nonfrightening manner.

This softcover is recommended to all who wish to educate children and young adolescents in a gentle way about child sexual abuse and the respect they must have for their own bodies. G.F. Hansen, M.D.

United States Coastal Charts, 1783-1861

Peter Guthorn, M.D. Exton, PA, Schiffer Publishing, 1984. Pp. 224. Illustrated. ($59)

In his book, *U.S. Coastal Charts 1783-1861*, Peter Guthorn has compiled many of the earliest published coastal charts along with much information about the methods of the original chartmakers, publishers, and printers. These charts are interesting not only for their historical significance but for the obvious differences in coastal structures in the past versus the present. The information, maps, and charts contained within this book would be an excellent starting point for anyone who wanted to show how a given coastal area has changed over the years.

The large format book contains 180 plates covering the Atlantic, Gulf, and Pacific coasts.

Dr. Guthorn has published three books on Revolutionary War mapping and another book on small boats and the New Jersey shore.

Mary Jo Hall, Ph.D.
Rider College

Drs. Allen; Baboczky; Brake; Corson; DiIelsi; Fifer; Goyne; Jones; Kaplan; Reisinger; Scoles; Simon; Wilson

Dr. James M. Allen

James Marshall Allen, M.D., a member of our Passaic County component, died on November 6, 1984, at Community Hospital, Montclair. Born in 1901, in Clinton Corners, New York, Dr. Allen received his medical degree from Columbia University's College of Physicians and Surgeons in 1927. He established his pediatric practice in Passaic and prior to his retirement in 1980 had been affiliated for 50 years with Passaic General Hospital, serving as director of the pediatric department for many years, and also had been on the staff of Beth Israel Hospital, Passaic. Dr. Allen was a member of the American Medical Association.

Dr. Eugene P. Baboczky

At the grand age of 86, Eugene Paul Baboczky, M.D., a retired member of our Hudson County component, died on November 6, 1984. Dr. Baboczky received his medical degree from Pazmany Peter University, Budapest, in 1923, and emigrated to the United States in the 1950s. He completed an internship at St. Mary's Hospital, West Virginia, and was licensed in New Jersey in 1968. Dr. Baboczky was an anesthesiologist affiliated with B.S. Pollak Hospital, Jersey City. Dr. Baboczky was a member of the American Medical Association.

Dr. Charles A. Brake

At the untimely age of 51, Charles Alan Brake, M.D., a member of our Somerset County component, died on November 15, 1984. Born in Chickamauga, Georgia, Dr. Brake received his medical degree from Emory University School of Medicine, in 1957. In the early years of his career, in which his specialty was internal medicine with emphasis on occupational medicine, he was on the faculty of Emory University School of Medicine, Atlanta, Georgia. In 1969, and up to the date of his death, Dr. Brake was a member of the health service department at Ortho Pharmaceutical Corporation at their Raritan facility.

Dr. Kenneth E. Corson

A family practitioner in Vineland, Kenneth Ellsworth Corson, M.D., died on November 28, 1984. Born in Bridgeton in 1904, Dr. Corson received his medical degree from Temple University's School of Medicine, Pennsylvania, in 1931. A member of our Cumberland County component, and a member of the American Medical Association, Dr. Corson was affiliated with Newcomb Hospital, Vineland. During World War II, he served for nearly six years in the medical corps of the United States Army. In 1981, Dr. Corson was a recipient of MSNJ's Golden Merit Award, honoring his 50 years as a physician.

Dr. Anthony J. DiIelsi

An emeritus member of our Camden County component, Anthony Joseph DiIelsi, M.D., died on November 23, 1984, at the venerable age of 80. Born in Philadelphia, Dr. DiIelsi received his medical degree from Hahnemann Medical College in 1932. He established a practice in internal medicine, with emphasis on cardiology, in Camden, where he remained until shortly before his retirement, when he moved his office to Haddon Heights. Dr. DiIelsi had been affiliated with West Jersey Hospital, Camden, and was a member of the American Medical Association. In 1982, he was one of the recipients of MSNJ's Golden Merit Award, honoring his 50 years of medical practice.

Dr. William T. Fifer

William Timothy Fifer, M.D., a lifelong resident of Bayonne, and general surgeon and family practitioner in that city for almost 50 years, died in Bayonne Hospital, on November 17, 1984. A member of our Hudson County component, Dr. Fifer received his medical degree from Georgetown University's School of Medicine, in 1926. He was a Fellow of the International College of Surgeons, was a member of the American Medical Association, and had served as a consultant at Bayonne Hospital. He had served as medical director of the Bayonne Board of Education for many years, and during World War II he was a medical officer/general surgeon in the medical corps of the United States Air Force. In 1976, Dr. Fifer was honored with MSNJ's Golden Merit Award in recognition of his 50 years in medicine.

Dr. James B. Goyne

On November 18, 1984, James Bevan Goyne, M.D., died at his home in Haven Beach on Long Beach Island, at the age of 73. Born in Ashland, Pennsylvania, Dr. Goyne received his medical degree from Jefferson Medical College in 1937. He first established a practice in Morristown, at which time he served as director and psychiatrist at Trenton State Hospital and the Morristown Guidance Center. In 1972, he became a member of our Ocean County component and established a practice in psychiatry at Haven Beach. Dr. Goyne was a Diplomate of the American Board of Psychiatry.

Dr. John P. Jones

A member of our Somerset County component, John Paul Jones, M.D., died on November 2, 1984, at the age of 58. Born in Memphis, Tennessee, Dr. Jones received his medical degree from the University of Tennessee's School of Medicine in 1956. He entered the fields of research and administration, serving as associate medical director at Charles Pfizer & Company, New York City, and as director of medical affairs at Ethicon,

Inc., Somerville, and his most recent career affiliation was with Johnson & Johnson, New Brunswick.

Dr. Henry L. Kaplan

At the age of 76, Henry Lewis Kaplan, M.D., died on November 8, 1984, at Saint Barnabas Medical Center, Livingston. A native of Poland, Dr. Kaplan emigrated to the United States and earned his medical degree at Rush Medical College, Chicago, in 1937. He established a practice in general medicine in Newark and served that community for 40 years prior to his retirement in 1978. A member of our Essex County component, Dr. Kaplan was affiliated with Newark Beth Israel Medical Center. For four years he served in the medical corps of the Army of the United States in World War II.

Dr. Paul B. Reisinger

At the venerable age of 90, Paul Bryson Reisinger, M.D., a member of our Mercer County component, died on November 24, 1984, at Mercer Medical Center, Trenton. Born in Uniontown, Pennsylvania, Dr. Reisinger received his medical degree from Jefferson Medical College in 1918. A general practitioner, Dr. Reisinger served for many years as medical director of The Children's Home Society of New Jersey, and also had been the physician for John A. Roebling Sons Company.

He had been affiliated with Mercer Medical Center and had served on the staff of the Orthopaedic Hospital, Trenton. In 1968, Dr. Reisinger was a recipient of MSNJ's Golden Merit Award in recognition of his 50 years of medical service.

Dr. Peter S. Scoles

A family practitioner in Sea Girt, for the last 16 years, Peter Serafino Scoles, M.D., died at Monmouth Medical Center, Long Branch, on December 6, 1984, at the age of 78. Born in New York City, Dr. Scoles received his medical degree from the Faculty of Medicine of the University of Lausanne, Switzerland in 1947. Dr. Scoles had been affiliated with Monmouth Medical Center, and was a member of our Monmouth County component. He was a Fellow of the New Jersey Academy of Medicine, a Fellow of the American Academy of Family Practice, as well as of the American Public Health Association, and the International Academy of Law and Science. Dr. Scoles had a lengthy career in the medical corps of the United States Army, having served in the Far East and Europe. He had been awarded the Silver Star, the Purple Heart, and numerous other medals. While in Korea, Dr. Scoles pioneered in the development of helicopter medical evacuations.

Dr. Philip H. Simon

A founder and staff member of Passaic's Beth Israel Hospital, Philip H. Simon, M.D., died on November 1, 1984, at The Mountainside Hospital, Montclair, at the age of 85. A native of Passaic, Dr. Simon received his medical education at Fordham University, and was graduated in 1921. He established a practice in general medicine with some emphasis on neuropsychiatry. He served Passaic for nearly 50 years prior to retirement in 1973. Dr. Simon had been a member of the AMA.

Dr. Lawrence A. Wilson

At the venerable age of 89, Lawrence Addison Wilson, M.D., a member of our Atlantic County component, died on November 19, 1984. A native of Burlington, North Carolina, Dr. Wilson received his medical degree from Jefferson Medical College of Philadelphia in 1924. He established a practice in internal medicine in Absecon and maintained his office there until his retirement in the mid-1970s. He was affiliated with Atlantic City's Medical Center; was a member of the American Medical Association; and was a Fellow of the American College of Chest Physicians. In 1974, Dr. Wilson received MSNJ's Golden Merit Award in recognition of his 50 years of medical practice.

Style Sheet

The Journal is the official organ of the Medical Society of New Jersey. The goals of The Journal are educational and informational. All material published in The Journal is copyrighted by MSNJ.

CONTENT

The educational content of each issue appears as scientific articles, based on research, original concepts relative to epidemiology of disease, and treatment methodology; case reports based on unusual clinical experiences; review articles; clinical notes, succinct items on some aspect or new observation or technique of a case experience; and special articles, which include evaluations, policy and position papers, and reviews of nonscientific subjects. Other topics include commentary (critical narration); medical history; therapeutic drug information; pediatric briefs; nutrition update; and an opinion column. Editorials are prepared by the Editor and by guest contributors on timely and relevant subjects; editorials are the responsibility of the author. The Doctors' Notebook section contains organizational, informational, and administrative items from MSNJ and from the community. Letters to the Editor and book reviews are welcome and will be published as space permits. The principal aim in the preparation of a contribution should be relevance to diagnosis and treatment and to education of patients and professionals. Preference will be given to professional authors from New Jersey and to out-of-state lecturers who submit a suitable manuscript based on a presentation made in New Jersey.

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1. Goldwyn RM: Subcutaneous mastectomy. *J Med Soc NJ* 74:1050-1052, 1977.
2. Dixon WJ, Massey FJ: *Introduction to Statistical Analysis.* New York, NY, McGraw-Hill, 1969, pp. 42-48.

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Receipt of each manuscript will be acknowledged and a copy delivered to the Editor who refers the paper to one or more members of the Editorial Board. The final decision is reserved for the Editor. No direct contact between the reviewers and the authors will be permitted, but authors will be informed of the reviewers' comments. The publication lag for original articles may be six months or more. Galley proofs will be submitted to the author for correction of typographical errors.

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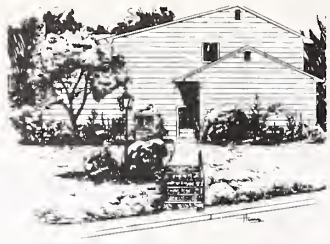
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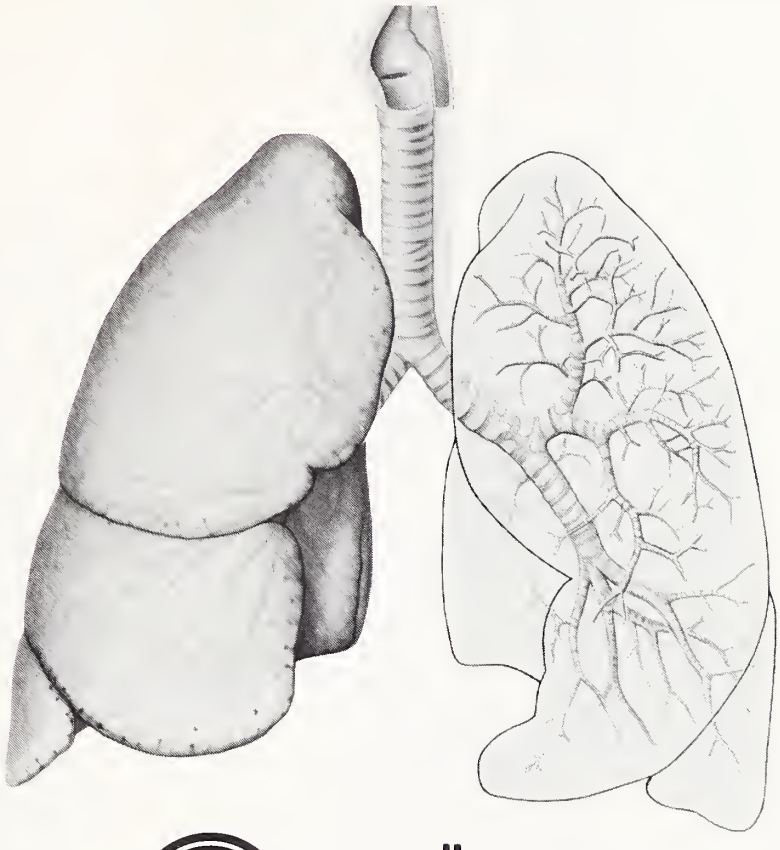
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offers effectiveness against the major causes of bacterial bronchitis

H. influenzae, *H. influenzae*, *S. pneumoniae*, *S. pyogenes*
(ampicillin-susceptible) (ampicillin-resistant)

Brief Summary. Consult the package literature for prescribing information.

Indications and Usage: Ceclor* (cefaclor, Lilly) is indicated in the treatment of the following infections when caused by susceptible strains of the designated microorganisms:

Lower respiratory infections, including pneumonia caused by *Streptococcus pneumoniae (Diplococcus pneumoniae), Haemophilus influenzae*, and *S. pyogenes* (group A beta-hemolytic streptococci).

Appropriate culture and susceptibility studies should be performed to determine susceptibility of the causative organism to Ceclor.

Contraindication: Ceclor is contraindicated in patients with known allergy to the cephalosporin group of antibiotics.

Warnings: IN PENICILLIN-SENSITIVE PATIENTS, CEPHALOSPORIN ANTIBIOTICS SHOULD BE ADMINISTERED CAUTIOUSLY. THERE IS CLINICAL AND LABORATORY EVIDENCE OF PARTIAL CROSS-ALLERGENICITY OF THE PENICILLINS AND THE CEPHALOSPORINS, AND THERE ARE INSTANCES IN WHICH PATIENTS HAVE HAD REACTIONS, INCLUDING ANAPHYLAXIS, TO BOTH DRUG CLASSES.

Antibiotics, including Ceclor, should be administered cautiously to any patient who has demonstrated some form of allergy, particularly to drugs.

Pseudomembranous colitis has been reported with virtually all broad-spectrum antibiotics (including macrolides, semisynthetic penicillins, and cephalosporins); therefore, it is important to consider its diagnosis in patients who develop diarrhea in association with the use of antibiotics. Such colitis may range in severity from mild to life-threatening.

Treatment with broad-spectrum antibiotics alters the normal flora of the colon and may permit overgrowth of clostridia. Studies indicate that a toxin produced by *Clostridium difficile* is one primary cause of antibiotic-associated colitis.

Mild cases of pseudomembranous colitis usually respond to drug discontinuance alone. In moderate to severe cases, management should include sigmoidoscopy, appropriate bacteriologic studies, and fluid, electrolyte, and protein supplementation. When the colitis does not improve after the drug has been discontinued, or when it is severe, oral vancomycin is the drug of choice for antibiotic-associated pseudomembranous colitis produced by *C. difficile*. Other causes of colitis should be ruled out.

Precautions: *General Precautions* — If an allergic reaction to Ceclor* (cefaclor, Lilly) occurs, the drug should be discontinued, and, if necessary, the patient should be treated with appropriate agents, e.g., pressor amines, antihistamines, or corticosteroids.

Prolonged use of Ceclor may result in the overgrowth of nonsusceptible organisms. Careful observation of the patient is essential. If superinfection occurs during therapy, appropriate measures should be taken.

Positive direct Coombs' tests have been reported during treatment with the cephalosporin antibiotics. In hematologic studies or in transfusion cross-matching procedures when antiglobulin tests are performed on the minor side or in Coombs' testing of newborns whose mothers have received cephalosporin antibiotics before parturition, it should be recognized that a positive Coombs' test may be due to the drug.

Ceclor should be administered with caution in the presence of markedly impaired renal function. Under such conditions, careful clinical observation and laboratory studies should be made because safe dosage may be lower than that usually recommended.

As a result of administration of Ceclor, a false-positive reaction for glucose in the urine may occur. This has been observed with Benedict's and Fehling's solutions and also with Clinitest* tablets but not with Tes-Tape* (Glucose Enzymatic Test Strip, USP, Lilly).

Broad-spectrum antibiotics should be prescribed with caution in individuals with a history of gastrointestinal disease, particularly colitis.

Usage in Pregnancy — Pregnancy Category B — Reproduction studies have been performed in mice and rats at doses up to 12 times the human dose and in ferrets given three times the maximum human dose and have revealed no evidence of impaired fertility or harm to the fetus due to Ceclor* (cefaclor, Lilly). There are, however, no adequate and well-controlled studies in pregnant women. Because animal reproduction studies are not always predictive of human response, this drug should be used during pregnancy only if clearly needed.

Nursing Mothers — Small amounts of Ceclor have been detected in mother's milk following administration of single 500-mg doses. Average levels were 0.18, 0.20, 0.21, and 0.16 mcg/ml at two, three, four, and five hours respectively. Trace amounts were detected at one hour. The effect on nursing infants is not known. Caution should be exercised when Ceclor is administered to a nursing woman.

Usage in Children — Safety and effectiveness of this product for use in infants less than one month of age have not been established.

Adverse Reactions: Adverse effects considered related to therapy with Ceclor are uncommon and are listed below.

Gastrointestinal symptoms occur in about 2.5 percent of patients and include diarrhea (1 in 70).

Symptoms of pseudomembranous colitis may appear either during or after antibiotic treatment. Nausea and vomiting have been reported rarely.

Hypersensitivity reactions have been reported in about 1.5 percent of patients and include morbilliform eruptions (1 in 100). Pruritus, urticaria, and positive Coombs' tests each occur in less than 1 in 200 patients. Cases of serum sickness-like reactions (erythema multiforme or the above skin manifestations accompanied by arthritis/arthralgia and, frequently, fever) have been reported. These reactions are apparently due to hypersensitivity and have usually occurred during or following a second course of therapy with Ceclor. Such reactions have been reported more frequently in children than in adults. Signs and symptoms usually occur a few days after initiation of therapy and subside within a few days after cessation of therapy. No serious sequelae have been reported. Antihistamines and corticosteroids appear to enhance resolution of the syndrome.

Cases of anaphylaxis have been reported, half of which have occurred in patients with a history of penicillin allergy.

Other effects considered related to therapy included eosinophilia (1 in 50 patients) and genital pruritus or vaginitis (less than 1 in 100 patients).

Causal Relationship Uncertain — Transitory abnormalities in clinical laboratory test results have been reported. Although they were of uncertain etiology, they are listed below to serve as alerting information for the physician.

Hepatic — Slight elevations in SGOT, SGPT, or alkaline phosphatase values (1 in 40).

Hematopoietic — Transient fluctuations in leukocyte count, predominantly lymphocytosis occurring in infants and young children (1 in 40).

Renal — Slight elevations in BUN or serum creatinine (less than 1 in 500) or abnormal urinalysis (less than 1 in 200).

[0617B2R]

Note. Ceclor* (cefaclor, Lilly) is contraindicated in patients with known allergy to the cephalosporins and should be given cautiously to penicillin-allergic patients.

Penicillin is the usual drug of choice in the treatment and prevention of streptococcal infections, including the prophylaxis of rheumatic fever. See prescribing information.

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References:
1. Strauss WE, McIntyre KM, Parisi AF, et al: Safety and efficacy of diltiazem hydrochloride for the treatment of stable angina pectoris: Report of a cooperative clinical trial. Am J Cardiol 49:560-566, 1982.
2. Pool PE, Seagren SC, Bonanno JA, et al: The treatment of exercise-inducible chronic stable angina with diltiazem: Effect on treadmill exercise. Chest 78 (July suppl):234-238, 1980.

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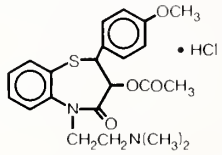
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Hemodynamic and Electrophysiologic Effects. Like other calcium antagonists, diltiazem decreases sinoatrial and atrioventricular conduction in isolated tissues and has a negative inotropic effect in isolated preparations. In the intact animal, prolongation of the AH interval can be seen at higher doses.

In man, diltiazem prevents spontaneous and ergonovine-provoked coronary artery spasm. It causes a decrease in peripheral vascular resistance and a modest fall in blood pressure and, in exercise tolerance studies in patients with ischemic heart disease, reduces the heart rate-blood pressure product for any given work load. Studies to date, primarily in patients with good ventricular function, have not revealed evidence of a negative inotropic effect; cardiac output, ejection fraction, and left ventricular end diastolic pressure have not been affected. There are as yet few data on the interaction of diltiazem and beta-blockers. Resting heart rate is usually unchanged or slightly reduced by diltiazem.

Intravenous diltiazem in doses of 20 mg prolongs AH conduction time and AV node functional and effective refractory periods approximately 20%. In a study involving single oral doses of 300 mg of CARDIZEM in six normal volunteers, the average maximum PR prolongation was 14% with no instances of greater than first-degree AV block. Diltiazem-associated prolongation of the AH interval is not more pronounced in patients with first-degree heart block. In patients with sick sinus syndrome, diltiazem significantly prolongs sinus cycle length (up to 50% in some cases).

Chronic oral administration of CARDIZEM in doses of up to 240 mg/day has resulted in small increases in PR interval, but has not usually produced abnormal prolongation. There were, however, three instances of second-degree AV block and one instance of third-degree AV block in a group of 959 chronically treated patients.

Pharmacokinetics and Metabolism. Diltiazem is absorbed from the tablet formulation to about 80% of a reference capsule and is subject to an extensive first-pass effect, giving an absolute bioavailability (compared to intravenous dosing) of about 40%. CARDIZEM undergoes extensive hepatic metabolism in which 2% to 4% of the unchanged drug appears in the urine. In vitro binding studies show CARDIZEM is 70% to 80% bound to plasma proteins. Competitive ligand binding studies have also shown CARDIZEM binding is not altered by therapeutic concentrations of digoxin, hydrochlorothiazide, phenylbutazone, propranolol, salicylic acid, or warfarin. Single oral doses of 30 to 120 mg of CARDIZEM result in detectable plasma levels within 30 to 60 minutes and peak plasma levels two to three hours after drug administration. The plasma elimination half-life following single or multiple drug administration is approximately 3.5 hours. Desacetyl diltiazem is also present in the plasma at levels of 10% to 20% of the parent drug and is 25% to 50% as potent a coronary vasodilator as diltiazem. Therapeutic blood levels of CARDIZEM appear to be in the range of 50 to 200 ng/ml. There is a departure from dose-linearity when single doses above 60 mg are given; a 120-mg dose gave blood levels three times that of the 60-mg dose. There is no information about the effect of renal or hepatic impairment on excretion or metabolism of diltiazem.

INDICATIONS AND USAGE

1. **Angina Pectoris Due to Coronary Artery Spasm.** CARDIZEM is indicated in the treatment of angina pectoris due to coronary artery spasm. CARDIZEM has been shown effective in the treatment of spontaneous coronary artery spasm presenting as Prinzmetal's variant angina (resting angina with ST-segment elevation occurring during attacks).
2. **Chronic Stable Angina (Classic Effort-Associated Angina).** CARDIZEM is indicated in the management of chronic stable angina. CARDIZEM has been effective in controlled trials in reducing angina frequency and increasing exercise tolerance.

There are no controlled studies of the effectiveness of the concomitant use of diltiazem and beta-blockers or of the safety of this combination in patients with impaired ventricular function or conduction abnormalities.

CONTRAINDICATIONS

CARDIZEM is contraindicated in (1) patients with sick sinus syndrome except in the presence of a functioning ventricular pacemaker, (2) patients with second- or third-degree AV block except in the presence of a functioning ventricular pacemaker, and (3) patients with hypotension (less than 90 mm Hg systolic).

WARNINGS

1. **Cardiac Conduction.** CARDIZEM prolongs AV node refractory periods without significantly prolonging sinus node recovery time, except in patients with sick sinus syndrome. This effect may rarely result in abnormally slow heart rates (particularly in patients with sick sinus syndrome) or second- or third-degree AV block (six of 1243 patients for 0.48%). Concomitant use of diltiazem with beta-blockers or digitalis may result in additive effects on cardiac conduction. A patient with Prinzmetal's angina developed periods of asystole (2 to 5 seconds) after a single dose of 60 mg of diltiazem.
2. **Congestive Heart Failure.** Although diltiazem has a negative inotropic effect in isolated animal tissue preparations, hemodynamic studies in humans with normal ventricular function have not shown a reduction in cardiac index nor consistent negative effects on contractility (dp/dt). Experience with the use of CARDIZEM alone or in combination with beta-blockers in patients with impaired ventricular function is very limited. Caution should be exercised when using the drug in such patients.
3. **Hypotension.** Decreases in blood pressure associated with CARDIZEM therapy may occasionally result in symptomatic hypotension.
4. **Acute Hepatic Injury.** In rare instances, patients receiving CARDIZEM have exhibited reversible acute hepatic injury as evidenced by moderate to extreme elevations of liver enzymes. (See PRECAUTIONS and ADVERSE REACTIONS.)

PRECAUTIONS

General. CARDIZEM (diltiazem hydrochloride) is extensively metabolized by the liver and excreted by the kidneys and in bile. As with any new drug given over prolonged periods, laboratory parameters should be monitored at regular intervals. The drug should be used with caution in patients with impaired renal or hepatic function. In subacute and chronic dog and rat studies designed to produce toxicity, high doses of diltiazem were associated with hepatic damage. In special subacute hepatic studies, oral doses of 125 mg/kg and higher in rats were associated with histological changes in the liver which were reversible when the drug was discontinued. In dogs, doses of 20 mg/kg were also associated with hepatic changes; however, these changes were reversible with continued dosing.

Drug Interaction. Pharmacologic studies indicate that there may be additive effects in prolonging AV conduction when using beta-blockers or digitalis concomitantly with CARDIZEM. (See WARNINGS).

Controlled and uncontrolled domestic studies suggest that concomitant use of CARDIZEM and beta-blockers or digitalis is usually well tolerated. Available data are not sufficient, however, to predict the effects of concomitant treatment, particularly in patients with left ventricular dysfunction or cardiac conduction abnormalities. In healthy volunteers, diltiazem has been shown to increase serum digoxin levels up to 20%.

Carcinogenesis, Mutagenesis, Impairment of Fertility. A 24-month study in rats and a 21-month study in mice showed no evidence of carcinogenicity. There was also no mutagenic response in in vitro bacterial tests. No intrinsic effect on fertility was observed in rats.

Pregnancy. Category C. Reproduction studies have been conducted in mice, rats, and rabbits. Administration of doses ranging from five to ten times greater (on a mg/kg basis) than the daily recommended therapeutic dose has resulted in embryo and fetal lethality. These doses, in some studies, have been reported to cause skeletal abnormalities. In the perinatal/postnatal studies, there was some reduction in early individual pup weights and survival rates. There was an increased incidence of stillbirths at doses of 20 times the human dose or greater.

There are no well-controlled studies in pregnant women; therefore, use CARDIZEM in pregnant women only if the potential benefit justifies the potential risk to the fetus.

Nursing Mothers. It is not known whether this drug is excreted in human milk. Because many drugs are excreted in human milk, exercise caution when CARDIZEM is administered to a nursing woman if the drug's benefits are thought to outweigh its potential risks in this situation.

Pediatric Use. Safety and effectiveness in children have not been established.

ADVERSE REACTIONS

Serious adverse reactions have been rare in studies carried out to date, but it should be recognized that patients with impaired ventricular function and cardiac conduction abnormalities have usually been excluded.

In domestic placebo-controlled trials, the incidence of adverse reactions reported during CARDIZEM therapy was not greater than that reported during placebo therapy.

The following represent occurrences observed in clinical studies which can be at least reasonably associated with the pharmacology of calcium influx inhibition. In many cases, the relationship to CARDIZEM has not been established. The most common occurrences, as well as their frequency of presentation, are: edema (2.4%), headache (2.1%), nausea (1.9%), dizziness (1.5%), rash (1.3 asthenia (1.2%), AV block (1.1%). In addition, the following eve were reported infrequently (less than 1%) with the order of prese tion corresponding to the relative frequency of occurrence.

Cardiovascular:	Flushing, arrhythmia, hypotension, brady dia, palpitations, congestive heart fail syncope.
Nervous System:	Paresthesia, nervousness, somnolen tremor, insomnia, hallucinations, and amne
Gastrointestinal:	Constipation, dyspepsia, diarrhea, vomit mild elevations of alkaline phosphatase, SG SGPT, and LDH.
Dermatologic:	Pruritus, petechiae, urticaria, photosensiti
Other:	Polyuria, nocturia.

The following additional experiences have been noted:

A patient with Prinzmetal's angina experiencing episodes vasospastic angina developed periods of transient asymptom asystole approximately five hours after receiving a single 60 dose of CARDIZEM.

The following postmarketing events have been reported in quently in patients receiving CARDIZEM: erythema multiforme; kopenia; and extreme elevations of alkaline phosphatase, SG SGPT, LDH, and CPK. However, a definitive cause and effect betw these events and CARDIZEM therapy is yet to be established.

OVERDOSAGE OR EXAGGERATED RESPONSE

Overdosage experience with oral diltiazem has been limi Single oral doses of 300 mg of CARDIZEM have been well tolera by healthy volunteers. In the event of overdosage or exaggera response, appropriate supportive measures should be employe addition to gastric lavage. The following measures may be consider

Bradycardia	Administer atropine (0.60 to 1.0 mg). If th is no response to vagal blockade, admini isoproterenol cautiously.
High-Degree AV Block	Treat as for bradycardia above. Fixed hi degree AV block should be treated with diac pacing.
Cardiac Failure	Administer inotropic agents (isoproteren dopamine, or dobutamine) and diuretics.
Hypotension	Vasopressors (eg, dopamine or levartere bitartrate).

Actual treatment and dosage should depend on the severity of clinical situation and the judgment and experience of the trea physician.

The oral/LD_{50}'s in mice and rats range from 415 to 740 mg and from 560 to 810 mg/kg, respectively. The intravenous LD_{50} these species were 60 and 38 mg/kg, respectively. The oral $LD_{}$ dogs is considered to be in excess of 50 mg/kg, while lethality seen in monkeys at 360 mg/kg. The toxic dose in man is not kno but blood levels in excess of 800 ng/ml have not been associa with toxicity.

DOSAGE AND ADMINISTRATION

Exertional Angina Pectoris Due to Atherosclerotic Co nary Artery Disease or Angina Pectoris at Rest Due to Co nary Artery Spasm. Dosage must be adjusted to each patie needs. Starting with 30 mg four times daily, before meals and bedtime, dosage should be increased gradually (given in divi doses three or four times daily) at one- to two-day intervals u optimum response is obtained. Although individual patients respond to any dosage level, the average optimum dosage ra appears to be 180 to 240 mg/day. There are no available data conc ing dosage requirements in patients with impaired renal or hep function. If the drug must be used in such patients, titration should carried out with particular caution.

Concomitant Use With Other Antianginal Agents:

1. **Sublingual NTG** may be taken as required to abort ac anginal attacks during CARDIZEM therapy.
2. **Prophylactic Nitrate Therapy** — CARDIZEM may be sa coadministered with short- and long-acting nitrates, but th have been no controlled studies to evaluate the antiang effectiveness of this combination.
3. **Beta-blockers.** (See WARNINGS and PRECAUTIONS.)

HOW SUPPLIED

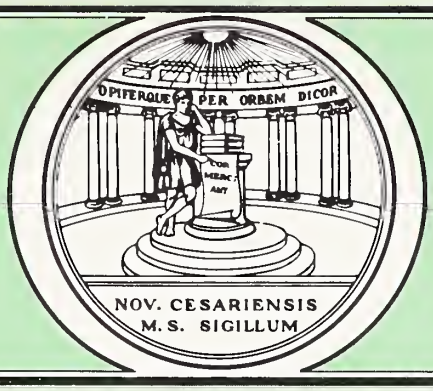
Cardizem 30-mg tablets are supplied in bottles of 100 (N 0088-1771-47) and in Unit Dose Identification Paks of 100 (N 0088-1771-49). Each green tablet is engraved with MARION on side and 1771 engraved on the other. CARDIZEM 60-mg sco tablets are supplied in bottles of 100 (NDC 0088-1772-47) and in U Dose Identification Paks of 100 (NDC 0088-1772-49). Each yel tablet is engraved with MARION on one side and 1772 on the ot

Issued 4/1

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MARION LABORATORIES, INC.
KANSAS CITY, MISSOURI 64137

MEMBERSHIP NEWSLETTER



MSNJ

THE MEDICAL SOCIETY OF NEW JERSEY VOLUME 21

PAY ATTENTION

All physicians in the U.S. have been sent a Physician's Professional Activities Census form. Completion of the form assures accurate classification in official AMA records and in the *American Medical Directory*. The PPA Census is conducted by the AMA every four years for the purpose of identifying the practice specialties and current professional activities of every physician in the country. All physicians—AMA members and nonmembers—are listed in the *Directory*, as well as those who no longer are in active practice.

Not completing the form may result in inaccurate classification in AMA records and in the *Directory*. Moreover, these classifications usually serve as the basis for the distribution of educational information from the AMA as well as complimentary journals and materials from pharmaceutical companies.

JAMES S. TODD, M.D.

James S. Todd, M.D., a member of AMA's Board of Trustees since 1980, was named AMA's Senior Deputy Executive Vice-President by James H. Sammons, M.D., the Executive Vice-President. In making the appointment Dr. Sammons cited the substantial contributions that Dr. Todd, a general surgeon from Ridgewood, has made to organized medicine.

A member of the executive committee of the AMA's Board of Trustees since 1983, Dr. Todd also was an AMA Commissioner to the Joint Commission on the Accreditation of Hospitals.

Before being elected to the Board, Dr. Todd was Chairman of the New Jersey delegation to the AMA. From 1979 to 1980, he was Chairman of the Ad Hoc Committee To Review the AMA's Principles of Medical Ethics.

In 1966, Dr. Todd was elected a Trustee of the Bergen County Medical Society, his first elective position in organized medicine. He became the Society's President in 1971 and was Chairman of the Board of Trustees of MSNJ from 1975 to 1979.

Since 1977, he has been Chairman of the Board of the New Jersey State Medical Underwriters, Inc. Dr. Todd is President of the Physicians' Insurers Association of America.

CONSENT TO TREATMENT

In a nationally publicized decision (in re Conroy), the Supreme Court of New Jersey has determined that a decision by a nursing home patient or his representative to consent to or refuse medical treatment should be honored by the courts. The issue in this case centered on the withdrawal of a nasogastric feeding tube from a comatose patient.

The Board of Trustees has requested the Governor to appoint a multidisciplinary high-level committee to develop guidelines to assist patients and physicians in resolving these highly emotional and complex issues. The Board also referred the Supportive Care Guidelines and the Conroy decision to the Committee on Biomedical Ethics.

TAXABILITY OF SUBORDINATED LOAN PAYMENTS

A decision has been rendered by the Tax Court declaring the subordinated loan payments made to the Medical Inter-Insurance Exchange of New Jersey (MIIENJ) to be a capital investment and not an ordinary business expense deductible by the taxpayer. The Court also ruled that the IRS position that the payments were a constructive dividend to shareholder/employees and wages to nonshareholder/employees was incorrect. A full explanation plus further advice will be forthcoming by Terence Heaney, Tax Counsel.

MALPRACTICE REINSURANCE ASSOCIATION

The Insurance Department has not yet determined how it will make up the $55 million deficit of the State Reinsurance Association. Several options are available, with the most commonly discussed being a surcharge against those insured through the state government or a surcharge against all physicians in New Jersey. The MIIENJ is prepared to litigate on behalf of its insureds.

ETHIOPIAN RELIEF FUND

The Bergen County Medical Society (BCMS) has "adopted" an Ethiopian physician who cares for 1,400 children in a pediatric facility for refugees in Makelle, about 250 miles from Addis Ababa, the capital of the famine-torn country.

Moved by a report from Rep. Marge Roukema (R), whose physician-husband is a BCMS member, the Society voted at its annual membership dinner to make Genene Bekele, M.D., an honorary member, with an unusual twist. The physicians decided to donate to Dr. Bekele $845 from the society contingency fund, the amount a Bergen county physician would pay to belong to the American Medical Associaton and his County and State Societies. Within 15 minutes, another $3,500 in pledges was collected from physicians at the meeting.

Since the dinner, the Society has collected a total of $9,000—almost half the $20,000 goal set by its president, Marc J. Crilly, M.D. The Passaic and Sussex County Medical Societies also have been soliciting funds, and Dr. Crilly has appealed to other county societies statewide.

Donations may be made to the BCMS Ethiopian Relief Fund at the BCMS, 170 Main St., Hackensack, NJ 07601.

CONGRESSIONAL COMMUNICATIONS

Medicare and Medicaid Reimbursement of Practitioners Who Lose a License in One Jurisdiction and Relocate to Another. The AMA expressed concern that health care practitioners who have been found unfit to practice in one jurisdiction can relocate and practice in another jurisdiction where they are licensed. Since the AMA Masterfile appears to be the only source of multistate licensing information, the AMA now will notify the medical licensure boards when it receives verifiable information concerning license revocation, suspension, or surrender for cause involving physician competency. The AMA stated that it would support a legislative proposal to close gaps in the federal government's authority to exclude a sanctioned practitioner from Medicare and Medicaid participation regardless of licensure status in other states. (Testimony before U.S. Senate Special Committee on Aging, May 1, 1984.)

Physician Reimbursement Under Medicare. The AMA testified on the success and growth of the Medicare program, the growth of health care costs, and how physician reimbursement and beneficiary liability is determined under Medicare. The testimony discussed the Association's support for a one-year freeze in physicians' fees and that this voluntary freeze was "in line with a one-year freeze of Medicare payments to physicians as proposed by the President in his recent budget." The Association opposed proposals to modify physician reimbursement by basing payments on the diagnosis related groups (DRG), mandating assignment, and through the "participating physician" concept. (Testimony before Senate Special Committee on Aging, March 16, 1984.)

AMA STATEMENTS

Alternative Medical Liability Act. The AMA testified in opposition to H.R. 5400 which establishes an alternative system for settlement of professional liability claims arising from the provision of health care services paid for or provided by federal programs. H.R. 5400 permits a physician or hospital to offer compensation to an injured patient for that patient's "net economic loss" and by so doing foreclose the patient from suits for compensation in the court system. The AMA stated that it is not clear that the bill will reduce any incidences of the practice of "defensive medicine." Rather than reduce aggregate health care costs, the bill is likely to increase them and lead to higher liability premiums. (Testimony before Subcommittee on Health, House Ways and Means Committee, June, 28, 1984.)

Supply of DTP Vaccine. At a Congressional hearing to explore a possible shortage of DTP (diptheria-tetanus-pertussis) vaccine, the AMA related its concerns about the supply of vaccine. The AMA called upon Congress to pass legislation establishing a federal program to compensate children who are injured severely by state and federally mandated immunizations. Such a program would be the exclusive remedy of persons injured.

COPING WITH VACCINE SHORTAGE

Now that two of the three U.S. manufacturers of DTP vaccine have stopped making it (only the Lederle Company continues to do so) and their stocks have been used up, vaccine supplies are insufficient to meet demand. To cope, the American Academy of Pediatrics recommends that we give only the first three of the usual six injections. Thus, babies in the first year of their lives would receive shots only at 2, 4, and 6 months of age. Later, they would not receive their usual followup shots at 18 months, and 2 and 4 years. These last three shots will have to be deferred until Lederle can boost production sufficiently to make supplies normal again. If these recommendations are adopted, the *Journal of the American Medical Association* (253:22,1985) reports, no less than 70 percent of recipients will be protected against pertussis and about 90 percent against diptheria and tetanus. While these diseases are potential killers and this program is far from ideal, it is the best that we can do for our children.

BEWARE

Organized crime at the regional level appears to be involved in prescription drug diversion. In one scam, an organized criminal conspiracy, a team of criminals carries an elderly cancer patient from state to state. One member of the ring, usually a young woman, takes the patient, who is legitimately ill, to each physician in town and asks for a drug such as Dilaudid® to ease her "grandfather's" pain during their trip. She may even ask the physician to telephone a bogus M.D. who will confirm the patient's condition. The team will hit every physician in town, have the prescriptions filled in different pharmacies, and then move on. A four-milligram tablet of Dilaudid®, which retails for $.29 in a pharmacy, gets $50 on the street.

FINI

"The book of life is brief. Make certain the chapters are made for good reading."

LEGISLATIVE UPDATE

Status of Legislation on Which MSNJ Has Taken an Active Position

Bill	Subject	MSNJ Position	Committee	Present Status
S-70 Codey	To change requirements for eligibility to be Commissioner of Health	Active Opposition	Senate: IHW	In committee
S-111 Bubba	To require a physician to present surgical consent forms at the time surgery is agreed upon	Active Opposition	Senate: LIP	In committee
S-243 Hagedorn	To provide procedures for involuntary civil commitment of the mentally ill	Active Opposition	Senate: IHW	In committee
S-424 Dorsey	To provide for the abolishment of certain state agencies for specific periods of time and to create a Joint Legislative Committee on Regulatory Agencies	Active Support	Senate: SGF&IR&VA	In committee
S-607 Bassano	To require the padding of all metal bars in school buses with energy-absorbing materials to be included in the State Board of Education's rules and regulations	Active Support	Senate: LPS&D	In committee
S-723 Brown	To require the State Department of Health to prepare a booklet on breast cancer and require physicians to give a copy of the booklet to breast cancer patients	Active Opposition	Senate: IHW	In committee
S-752 Hirkala	To provide that certain information of hospitals and long-term health care facility review committees be considered confidential	Active Support	Senate: IHW	In committee
S-754 Hirkala	To provide immunity from civil liability to members of hospital governing bodies in connection with certain review actions	Active Support	Senate: J	In committee
S-1067 Feldman	To establish and license two categories of social workers	Active Opposition	Senate: IHW	In committee
S-1079 Dumont	Provides for a 3-year statute of limitations, except for fraud, intentional concealment, or nontherapeutic or diagnostic purpose. Minors have until age 11 or any injury prior to age 8	Active Support	Senate: J	In committee
S-1112 Hurley	To establish a cap on the amount of damages which may be awarded for pain and suffering in certain civil actions	Active Support	Senate: J	In committee
S-1135 Dalton	To eliminate certain sources of windfall benefits in personal injury and wrongful death actions	Active Support	Senate: J	In committee

LEGISLATIVE UPDATE

Status of Legislation on Which MSNJ Has Taken an Active Position

Bill	Subject	MSNJ Position	Committee	Present Status
S-1140 Feldman	To impose certain requirements on the plaintiff in a medical malpractice proceeding	Active Support	Senate: J	In committee
S-1182 Saxton	To establish the Automobile Insurance Medical Fee Schedule Board	Active Opposition	Senate: LIP	In committee
S-1190 Feldman	To authorize a court to award reasonable attorney's fees to a party who prevails against a frivolous claim for relief in a civil action	Active Support	Senate: J	In committee
S-1775 Orechio	Allows chiropractors who are licensed to practice by written examination in any state and who have completed 4,300 classroom hours in a chiropractic school to become licensed to practice by virtue of a clinical examination	Active Opposition	Senate: LIP	Out of Assembly; 2nd reading
S-1839 Dalton	Amends existing law to allow a psychologist to supply evidence of a need for guardianship of a minor who is in the custody of the New Jersey Division of Mental Retardation	Active Opposition	Senate: IHW	Out of committee; 2nd reading; amended
S-1840 Cardinale	Exempts the private practice of medicine from the certificate of need law	Active Support	Senate: IHW	In committee
S-1846 Garibaldi	Provides that cancers caused by exposure to heat, cold, radiation, or a known carcinogen which manifest themselves in active police or firemen are assumed to be accidental and work-related disabilities	Active Opposition	Senate: SGF&IR&VA	In committee
S-2019 Lynch	Creates the profession of contact lens dispensing and fitting for nonphysicians and nonoptometrists. Licensure and regulation would be through the Board of Examiners of Ophthalmic Dispensers and Ophthalmic Technicians. A prescription by a licensed optometrist or physician would be required	Active Opposition	Senate: LIP	In committee
S-2051 Feldman	Appropriates $9.45 million to design an osteopathic medical school in Stratford. Also provides construction monies for classrooms and administrative offices	Active Opposition	Senate: ED	Out of committee; 2nd reading; amended

LEGISLATIVE UPDATE

Status of Legislation on Which MSNJ Has Taken an Active Position

Bill	Subject	MSNJ Position	Committee	Present Status
S-2159 Hagedorn	Substantially alters the involuntary commitment law. Significantly, certification may be effected by psychologists, nurses, or social workers who have conducted an examination of the person within the three days prior to certification	Active Opposition	Senate: J	In committee
S-2379 Costa	Provides that consulting physicians are not to be reimbursed unless patient has agreed, in writing, prior to consultation. Substantial incapacity of patient and mandatory consultation as a result of law, hospital rule, or insurance contract are excepted	Active Opposition	Senate: IHW	In committee
S-2485 Bassano	Grants owners of buildings and businesses open to public, the ability to regulate smoking within their premises	Active Support	Senate: LPS&D	Out of committee; 2nd reading; amended
S-2487 Dalton	Requires employers to establish written policies to control smoking in the work environment	Active Support	Senate: LPS&D	Out of committee; 2nd reading; amended
S-2488 Contillo	Requires government supervisors to establish written policies to control smoking in government buildings	Active Support	Senate: LPS&D	Out of committee; 2nd reading; amended
S-2489 Graves	Prohibits smoking in public conveyances	Active Opposition	Senate: LPS&D	Out of committee; 2nd reading; amended
A-115 Otlowski	To authorize optometrists to prescribe a limited number of eye medications	Active Opposition	Assembly: HERP	In committee
A-708 Hardwick	To create a temporary committee to study Diagnosis Related Group System used for setting hospital rates and appropriate $45,000	Active Support	Assembly: CHHS	In committee
A-926 Weidel	To create an Automobile Insurance Fee Schedule Board in the Department of Insurance to adopt a reasonable fee schedule for medical services arising from passenger automobile accidents	Active Opposition	Assembly: BI	In committee
A-960 Miller	To permit individual patients or insurers to appeal hospital bills in cases of assignments under the Diagnosis Related Groups	Active Support	Assembly: CHHS	In committee

LEGISLATIVE UPDATE

Status of Legislation on Which MSNJ Has Taken an Active Position

Bill	Subject	MSNJ Position	Committee	Present Status
A-963 Miller	To eliminate the Diagnosis Related Groups methodology and replace it with one to be devised by the New Jersey Department of Health in one year	Active Support	Assembly: CHHS	In committee
A-1056 Muziani	To require attending physicians and certified nurse midwives to inform pregnant women of any drugs expected to be used during pregnancy and the possible effects thereof	Active Opposition	Assembly: CHHS	Passed in Assembly; received in Senate committee
A-1116 Patero	To permit licensed psychologists to certify disability under Temporary Disability Benefits Law	Active Opposition	Assembly: L	Out of committee; 2nd reading; amended
A-1159 Herman	To require licensed physicians or chiropractors to notify the State Board of Medical Examiners if they accept Medicare assignments	Active Opposition	Assembly: HERP	Out of committee; 2nd reading; amended
A-1471 Garvin	To require a physician to obtain, in advance, the patient's authorization to perform a biopsy or mastectomy	Active Opposition	Senate: IHW	Signed into law as c. 185 P.L. 1984
A-1541 Karcher	To provide for the licensing of persons who practice hypnosis and limit the practice, teaching, or preparation of hypnosis tapes to licensed practitioners	Active Opposition	Assembly: HERP	Out of committee; 2nd reading; amended
A-1559 Garvin	Requires Dept. of Health and the State Board of Medical Examiners to prepare a booklet on all aspects of the treatment of breast cancer. Physicians are required to distribute the book to appropriate patients and to discuss it with them.	Active Opposition	Assembly: CHHS	In committee
A-1682 Muhler	Creates a seven-person Board within the Department of Human Services vested with the authority to release or continue the commitment of persons who were found incapable of standing trial or not guilty by reasons of insanity. A Superior Court judge currently makes these decisions	Active Opposition	Assembly: CHHS	In committee
A-1870 Garvin	Amends existing statutes to require either seat belts or restraint systems for all children under ten in a motor vehicle. Current law applies to children under age five	Active Support	Assembly: CI	In committee

LEGISLATIVE UPDATE

Status of Legislation on Which MSNJ Has Taken an Active Position

Bill	Subject	MSNJ Position	Committee	Present Status
A-1921 Miller	Establishes a 3-year statute of limitations in tort actions against health care providers. Children would have until age 11 to bring action for injuries prior to age 8. After age 8, they come under the 3-year standard. Fraud, concealment, and unintentional foreign bodies "toll" the statute	Active Support	Assembly: JUD	In committee
A-1922 Miller	Provides that within 60 days of filing a medical malpractice complaint, the plaintiff must supply an affidavit, by a qualified expert, that reasonable cause exists to believe malpractice occurred	Active Support	Assembly: JUD	In committee
A-2115 Otlowski	Permits optometrists to use topical drugs for treatment and diagnostic purposes	Active Opposition	Assembly: CHHS	Returned to Committee
AR-31 Herman	Requests the Commissioner of Health to educate the public, particularly young people, about the dangers of cigarette smoking	Active Support	Assembly: CHHS	In committee
A-1918 Miller	Provides that collateral sources of payment shall be used to offset damages. Further provides structured payments may be used at the request of either party if the future damages exceed $100,000	Active Support	Assembly: JUD	In committee
A-1919 Miller	Provides a $100,000 cap on damages for pain and suffering to personal injury actions	Active Support	Assembly: JUD	In committee
A-2106 Paterniti	Requires nursing homes with 100 beds or more to dedicate 10 percent of bed capacity to indigent, 10 percent to complex care, and 10 percent for medical day care services	Active Opposition	Assembly: CHHS	In committee
A-2122 Cooper	Establishes seating restraint and emergency exit requirements for school buses	Active Support	Assembly: ED	In committee
A-2293 Kalik	Appropriates $9.45 million for the UMDNJ Osteopathic School in Stratford	Active Opposition	Assembly: RFA	Signed into law as c. 4 P.L. 1985
A-2304	To require that the driver and passengers in the front seat of an operating passenger automobile wear the safety seat belt provided	Active Support	Assembly: LPSD	Signed into law as c. 179 P.L. 1984

LEGISLATIVE UPDATE

Status of Legislation on Which MSNJ Has Taken an Active Position

Bill	Subject	MSNJ Position	Committee	Present Status
A-2140 Rooney	Provides that a judge may order a juvenile offender to be examined by a physician, optometrist, or audiologist	Active Opposition	Assembly: JUD	Passed in Assembly; in Senate committee
A-2757 Kern	Empowers the SBME to license and regulate nurse-midwives. Creates five-member Nurse-Midwives Examining Committee which would have the power to license and regulate nurse-midwives. Committee would have stipulated, delegated powers from Board and would function independent of Board	Active Opposition	Assembly: HERP	In committee
A-2889 Herman	Provides for separate licensing board to register physician assistants who would function under the supervision of a licensed physician at the 2:1 ratio	Active Opposition	Assembly: CHHS	In committee

Senate Committee Key

ED:	Education
IHW:	Institutions, Health and Welfare
J:	Judiciary
LIP:	Labor, Industry and Professions
LPS&D:	Law, Public Safety and Defense
SGF&IR&VA:	State Government, Federal & Interstate Relations & Veterans Affairs

Assembly Committee Key

BI:	Banking and Insurance
CHHS:	Corrections, Health and Human Services
CI:	Commerce and Industry
ED:	Education
HERP:	Higher Education and Regulated Professions
JUD:	Judicial
L:	Labor
LPSD:	Law, Public Safety and Defense
RFA:	Revenue, Finance and Appropriations

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Dependent Spouse*	100,000	65.00	200,000	130.00	250,000	162.50
Dependent Child(ren)* regardless of number	10,000	12.00	10,000	12.00	10,000	12.00

***Note:** The Eligible Person is the beneficiary of the Dependent Spouse and/or the Dependent Child(ren).

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Loss of Life	100%	Speech	50%
Each Hand	50%	Hearing of Each Ear	25%
Each Foot	50%	Thumb and Index Finger of the Same Hand	25%
Sight of Each Eye	50%		

The total payment for all of the losses of any one insured person because of any one accident will not be more than the face amount which applies.

ELIGIBILITY

You (the Eligible Person) are eligible to apply for this policy if you are under age 70, a member of the professional association endorsing this plan and are actively engaged in the occupation or profession which qualifies you for such membership.

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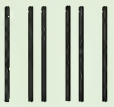
Each of your unmarried children who is chiefly dependent upon you or your spouse and is under 19 years of age is eligible to be included for a Face Amount of $10,000 each.

An unmarried child who is a full-time student attending an accredited school of higher education will continue to be eligible until he or she becomes 25 years of age.

An unmarried child who is unable to hold a self-sustaining job because of a developmental, mental, or other physical incapacity (as defined by the laws of the state in which this contract is issued) will (regardless of age) continue to be considered eligible provided such incapacity occurred prior to age 19.

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Office Use Only
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3. **Occupation or Profession** _____ **Date of Birth** ___/___/___

4. **Name of Plan Sponsor** THE MEDICAL SOCIETY OF NEW JERSEY (Name of Professional Association endorsing this plan)

5. **Are you:** under age 70, a member of the plan sponsor named above, and actively engage in the occupation or profession which qualifies you for such membership? ☐ Yes, ☐ N

6. **Schedule:** Write "None" under "Face Amount" and opposite "Dependent Spouse" and/ "Dependent Child(ren)" if benefits are not desired for these persons.

	Face Amount	Premium
Eligible Person	$	$
Dependent Spouse		
Dependent Child(ren) regardless of number		
Total Annual Premium Due **(please enclose payment)**		$

7. **Beneficiary of Eligible Person** _____ (Full Given Name) (Relationship) (Date of Bir

8. **It is understood and agreed that:** premium will be paid to Nationwide or its authorize representative using the mode of premium payment indicated above.

Date _____ Signature of Eligible Person _____

GR-9200

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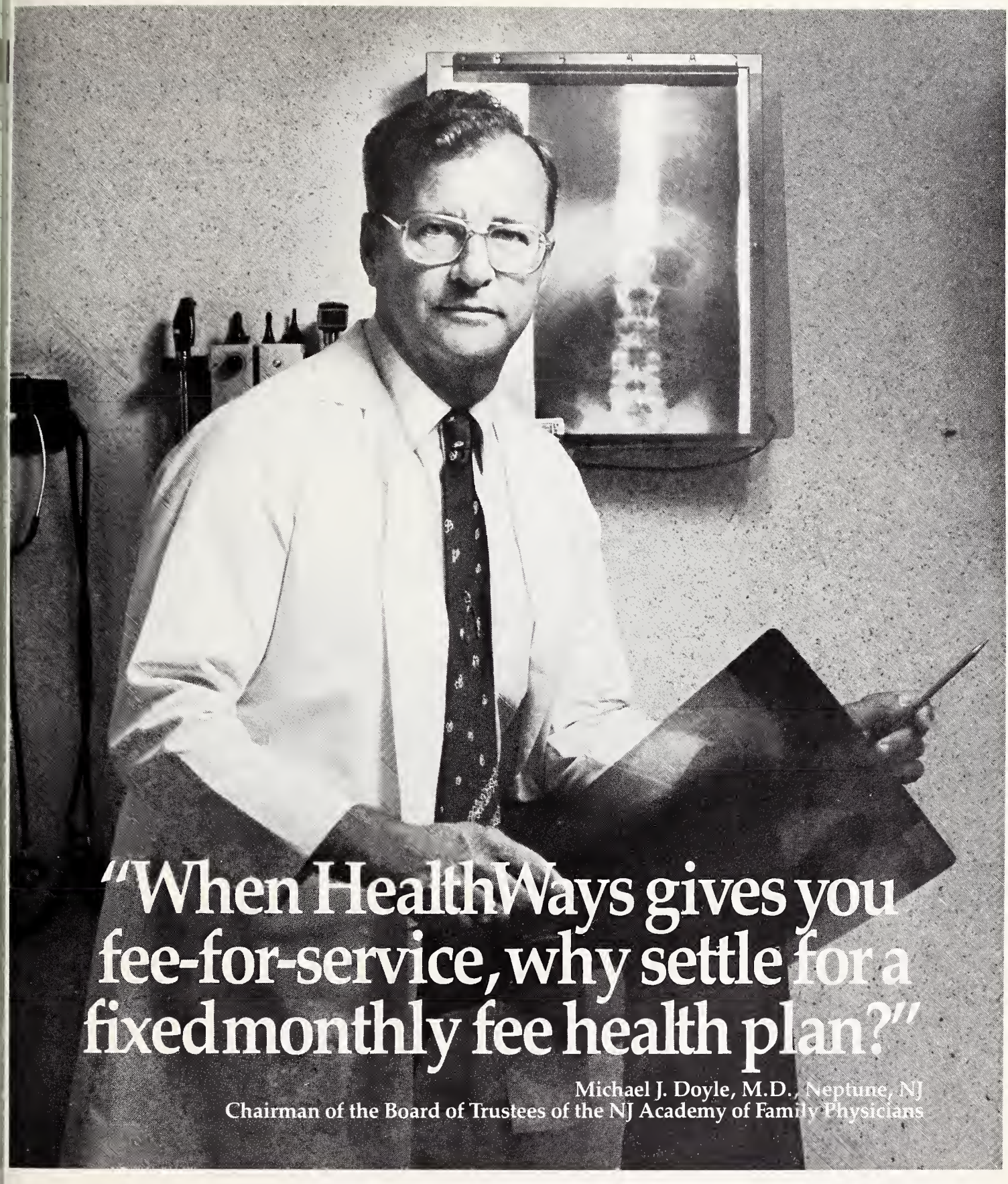
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MSNJ

THE MEDICAL SOCIETY OF NEW JERSEY VOLUME 6

COMPUTERS IN MEDICINE: POTENTIAL LIABILITY ISSUES

JAMES E. GEORGE, M.D., J.D., AND MADELYN S. QUATTRONE, J.D.*

An advertisement in a recent medical journal described a preprogrammed microcomputer which computes in 20 seconds the probability that a patient has acute ischemic heart disease. The handheld, battery-operated computer derives the probability from the answers to seven yes/no questions printed on the faceplate. A study of the computer, conducted in the emergency rooms of six New England hospitals, revealed that the rate of false-positive admissions to CCUs was reduced by 30 percent without any increases in false-negative diagnoses. The authors suggested that widespread use of this predictive instrument could reduce the number of CCU admissions in this country by more than 250,000 per year.

Computers have become an integral part of today's society and a wide variety of health care functions are being performed by computers. Many hospitals have computerized accounting and billing, and many larger hospitals have computerized medical records. The microcomputer is just one example of the many computers being developed for diagnosis, selection of treatment, and performance of medical procedures.

As the practice of medicine is changed by the use of computers, new medicolegal issues will confront the courts: Who will be liable if a patient is injured as a result of a computer error? Could a hospital be liable for failing to have a computer in certain situations? Can a physician be required to "consult" a computer if one is available? Must a physician follow the "consultant's" recommendations? The questions presented are as varied as are the uses for computers. The answers depend on both the factual circumstances (i.e., What is the computer's function?) and the law the court applies. What is almost certain is that where patients claim injury due to computer error or a physician's alleged failure to use a computer, these issues undoubtedly will be raised in lawsuits.

USES OF COMPUTERS

There are two types of computer systems which can aid a physician in making a diagnosis and/or selecting treatment. One type can interpret physical data on specific body conditions and functions, such as a computer-read electrocardiogram; these systems can provide fairly conclusive "opinions" on which the physician can rely without significant independent research or evaluation. The second type is a program which provides physicians with a list of possible diagnoses or treatments based on more extensive symptom data. These serve mainly as physician memory reinforcers.

Computers also play a major role in the performances of many medical treatment procedures. They can record details they observe on the conditions of patients and monitor patients during surgery and postoperative recovery in intensive care units. Because of their mechanical reliability, data processing capacity, persistence, and speed, computers may outperform people.

*From the Department of Professional Liability Control, MSNJ, where Dr. George is Director and Editor of *PLB* and Ms. Quattrone is Assistant Editor of *PLB*. Correspondence may be addressed to A. Ronald Rouse, MSNJ, Two Princess Road, Lawrenceville, NJ 08648.

BASIS FOR POTENTIAL LIABILITY

In a medical malpractice suit, the plaintiff generally must prove by expert testimony that he was injured because his physician failed to perform with the skill and learning commonly possessed and exercised by members of the profession in good standing.

In the past, a defendant's performance was measured against doctors or hospitals in the defendant's home community. Most jurisdictions, including New Jersey, have abandoned this rule due to the standardization of medical training. The standard of conduct required is thus what is customary and usual in the profession. The question arises, can a physician be held liable for failure to use a computer where such use is not customary or usual?

Several cases indicate that custom will not always be determinative in medical negligence suits. In 1974, the Supreme Court of Washington in *Helling v Carey*, 83 Wash. 2d 514, said that compliance with custom could not insulate physician defendants from liability. The court found two ophthalmologists negligent as a matter of law for failing to administer a glaucoma test to a patient under 40 despite uncontradicted expert testimony that their conduct was universal practice. The court stressed the test's simplicity, inexpensiveness, availability, and ability to diagnose with certainty. When these factors were weighed against the extreme risk of damage created by failure to administer the test, the court found the ophthalmologists' conduct unreasonable and thus negligent.

Similarly, hospital liability was broadened in *Darling v Charleston Community Memorial Hospital*, Ill. App.2d 253 (1964), *aff'd* 33 Ill.2d 326 (1965), *cert. denied* 383 U.S. 946 (1966), when the court also substituted the standard of reasonableness for that of customary care.

These cases open up the possibility for courts to find negligence in medical malpractice cases alleging failure to make use of computers even though the use of a computer may not be customary under the circumstances. A physician could be found liable for failing to use a computer for diagnosis, selection of treatment, or provision of treatment procedures if such use becomes customary within the profession or if a court found the omission negligent under ordinary negligence theory.

Since computer systems that make diagnoses and select treatments presently serve mainly as memory reinforcers, a physician who fails to use such a system and makes an erroneous diagnosis or selects an inappropriate treatment probably would not be found negligent for failure to use a computer unless the patient had a rare problem. If a doctor misdiagnoses or incorrectly treats a common condition, any malpractice would be the result of his personal error rather than his failure to use the computer system.

Reliance on erroneous output from a laboratory diagnosis system (e.g. one that interprets electrocardiograms) whose use was customary in the profession probably would not subject the physician to liability. The physician would be exercising due care unless the error would be obvious to a physician with the appropriate degree of skill.

A physician could be held liable for injury that resulted from use of an inappropriate computerized therapy system, malfunctioning of a therapy system, or from reliance on erroneous information collected by a data logging or monitoring system. While a physician would not be required to examine the devices for latent defects, he must use the regular degree of care expected in selecting and applying these devices.

In some cases computers can provide information relevant to diagnosis which is not otherwise discoverable by the physician. The CAT scan is an example. An argument for finding a physician negligent for failure to use a computer is more persuasive where the computer provides unique information or performs a diagnosis-related task in a superior manner. One article suggests that omission of use of such computer systems should be held negligent when a patient is injured unless the treating physician presents evidence that, at the time of diagnosis, he had all the information the computer would have provided.

In some situations, a hospital might be held liable for failure to have a computer system, the use of which could have prevented harm to a patient. Hospitals owe a duty to patients to exercise due care in providing medical equipment and devices. When use of computers for particular purposes becomes customary in hospitals, failure to provide such equipment may be found to constitute negligence.

Where program errors in clinical laboratory and therapy systems cause injuries, a suit based on strict liability may result. There are few cases holding hospitals strictly liable for injuries resulting from defective medical products. While courts have preferred to hold the manufacturer of the product liable rather than the hospital, the hospital in fact may be the manufacturer in the case of medical computer programs.

In a recent case, *Johnson v Sears, Roebuck & Co.*, a federal district court held that although strict liability was inappropriate for medical services, it was appropriate for mechanical and administrative services. Proper performance of these functions by hospitals for doctors and patients is in the public interest. Under this standard, programs for administration and machinery operation would be considered mechanical and administrative.

In an Illinois case, *Dubin v Michael Reese Hospital and Medical Center*, the court said that a hospital could be strictly liable for defective x-rays. Thus, a hospital that is the manufacturer of a product may be treated by the courts like any other manufacturer.

CONCLUSION

The application of computers to medical and hospital tasks means that the nature of medical care is changing substantially. Medical computer systems not only will help health care professionals perform their jobs better but they also will be able to perform some tasks beyond the capabilities of people.

At the same time, the Helling and Darling cases underscore the trend toward increasing the standard of care which physicians and hospitals must provide. With this in mind, as cases involving computer-related injuries are presented to the courts, one only can speculate as to the potential liability of physicians and hospitals in this area. Unfortunately, one would have to bet that liability in this area will increase.

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Containing Health Care Costs

Jury Awards; Business and Health Care

Disturbing inequities in the way juries compensate plaintiffs for injuries were revealed in a study recently released by the Rand Corporation's Institute for Civil Justice (ICJ). According to the report, people injured on the job or harmed by defective products or medical negligence receive up to four times as much money in successful lawsuits as those who suffer similar injuries in traffic accidents and other mishaps. The information suggests that Cook County juries "may increasingly have invoked a two-tier system of justice, applying different standards of compensation in 'high stakes' cases."

ICJ examined injuries and losses claimed by 21,500 plaintiffs in 9,000 trials in Cook County, Illinois, from 1960 through 1979. Cases involving compensation for injuries are "central to the civil justice system," said Mark A. Peterson, a senior ICJ analyst who authored the report summarizing the study. In Cook County, for example, 88 percent of the plaintiffs sought money for injuries. Peterson identified and evaluated each plaintiff's injuries according to six factors: number, type, severity, extent of disability, medical expenses, and income lost because of the injuries.

Sixty percent of claims were for slight or moderate injuries such as a cut, bruise, sprain, or other minor injury to the head, neck, back, or trunk, while 25 percent were for serious injuries, Peterson said. While termed slight or moderate, these injuries did not seem to be trivial, and 95 percent involved some apparent disability. Sixty-three percent of the plaintiffs suffered multiple injuries and 75 percent experienced temporary disability.

When it came to awarding compensation, the disparities among types of cases became apparent. For example, a successful plaintiff who lost one or both legs due to medical malpractice received a median award of $754,000 while a plaintiff who suffered the same injury in an auto crash received a median award of $199,000. A person who broke his arm in a workplace accident and won his case probably received about $24,000, but someone who suffered a broken arm in an auto crash received only about $6,000.

"The greater severity of injuries and larger specials (damages) for plaintiffs who file both a work injury and a product liability claim are primarily responsible for the large awards in these cases," Peterson said. "But the results are not completely reassuring. Plaintiffs in work injury, malpractice, and product liability cases still received awards so large that they cannot be explained entirely by severe injury and high economic loss."

Peterson said contributory negligence could be one possible part of the explanation, but said it is unlikely that it is the full reason. "Juries may tend to sympathize with certain plaintiffs more than with defendants, such as workers suing corporate employers or patients suing doctors. Juries also may be willing to impose far larger awards against 'deep pocket' defendants, such as manufacturers, employers, doctors, or government agencies—particularly when a plaintiff is severely injured. In any event, the wide variation in awards for severely injured plaintiffs raises serious questions about the equity of jury decisions." (*Medical Liability Monitor*, Vol. 9, No. 12, December 27, 1984)

MEDICAL MALPRACTICE: HOW IT AFFECTS BUSINESS AND HEALTH CARE

Almost everyone eventually winds up paying part of the bill for medical malpractice insurance—a significant although indirect contributor to the soaring costs of health care. While these costs are not rising as rapidly as in recent years, they still are outpacing inflation and are disproportionate in the context of other economic indicators.

Understanding how the medical malpractice system works is a large stride toward controlling what it costs. The U.S. Chamber of Commerce submitted testimony during the 98th Congress on a joint Senate and House bill (HR-5400/S-2690) entitled the "Alternative Medical Liability Act and Defensive Medicine." To gain perspective on medical malpractice for the *Washington Briefing*, the Washington Service Center's (WSC) Nick Rucci interviewed the Chamber's executive responsible for health care matters, Eric Oxfeld, who also is an attorney. Rucci is director of health care services for the WSC and is a member of the Chamber's Health Care Committee.

NR: What is medical malpractice?

EO: Medical malpractice is a term used loosely to describe the common law tort system, as it applies to improper performance of professional duties by a

*This item from the Department of Professional Liability Control, MSNJ, was prepared by James E. George, M.D., J.D., and A. Ronald Rouse, who are, respectively, Director of the Department and Director of Special Projects.

physician or other provider of health services. A person harmed by negligence in treatment may sue for damages, under rules developed primarily through court decisions and varying from state to state.

NR: How do malpractice insurance and defensive medicine practices affect business?

EO: Malpractice insurance and defensive medicine conservatively are estimated to be about 6 percent of the total health care bill. Revisions to the medical malpractice system that lower malpractice-related expenses would aid efforts to contain health-care costs. Numerous approaches to malpractice currently are being investigated. In evaluating them, one must examine the need for action, the balance of equities among plaintiffs, defendants, and users of health care, and, if legislation is advisable, the level and extent of government involvement.

NR: Most health care providers carry malpractice insurance. What are the cost consequences of this coverage?

EO: Over the last decade, the cost of this insurance has climbed faster than the overall health care rate. Cost varies by geographic area and specialty. The upper extreme is over $80,000 for some obstetrician-gynecologists in New York. These costs are expected to rise considerably over the next two years. This growing cost has obvious consequences. Physicians are reluctant to practice specialties for which insurance is relatively expensive. In addition, consumers must pay more for health services, because malpractice insurance adds to overhead, and because practitioners are more likely to order precautionary tests or other procedures designed to protect them against possible malpractice claims—so-called defensive medicine. The American Medical Association estimates that this costs more than $15 billion a year.

NR: It seems unlikely that with all the advances in medical treatment, physicians have become more negligent in providing health care. What, then, has caused this problem?

EO: One reason may be that the character of health care has changed. For example, today's practitioners probably have more impersonal relationships with their patients, and it may be easier to sue a stranger. And let's not ignore the growing trend toward specialization. It means that patients now consult a number of physicians rather than a trusted "family" doctor, and often do not have the opportunity to develop a continuing rapport. And physicians themselves may be reluctant to develop relationships with patients lest something they say be used against them. Finally, the growth in popularity of health maintenance organizations (HMOs) and preferred provider organizations may mean that patients are relying less and less on one familiar practitioner. Another reason may be that patients expect too much. Medicine is an inexact science—or art, at best—and patients with identical symptoms may not respond in the same way to identical treatment. Then, too, Americans notoriously are litigious, and may be inclined to sue if the treatment does not turn out as they expect. But the persistence of symptoms—or even death, unfortunately—does not necessarily mean that a wrongful act has been committed. The wide publicity given to huge settlements also plays a role in encouraging suits.

NR: An often overlooked solution to any problem is to do nothing and let the issue resolve itself. Is "no action" an acceptable approach?

EO: Some argue that no action is necessary because current economc trends may solve the problem. For example, the trend toward use of HMOs and other cost-containment efforts has led to shorter hospital stays. Because malpractice claims are typically associated with hospital treatment, the number of malpractice claims may decline accordingly. Furthermore, starting the diagnostic-related group (DRG) prospective payment system for Medicare and Medicaid may force providers to abandon defensive medicine practices out of economic necessity. In addition, malpractice insurers and physicians' organizations have begun to educate health care practitioners on how to avoid malpractice claims. Others would say that the problem shows few signs of abating. Critics of the DRG system and alternative delivery system assert that the fresh emphasis on cost cutting itself may generate more claims. They observe that patients may not be receiving all the treatment they need or that they may be released from hospitals before they completely are well. Moreover, the development of law firms specializing in medical malpractice claims may be a force for additional malpractice litigation. And, too, the courts seem to be constantly expanding the grounds for actions against physicians and their insurers.

NR: What are the states doing to help control the costs of medical malpractice?

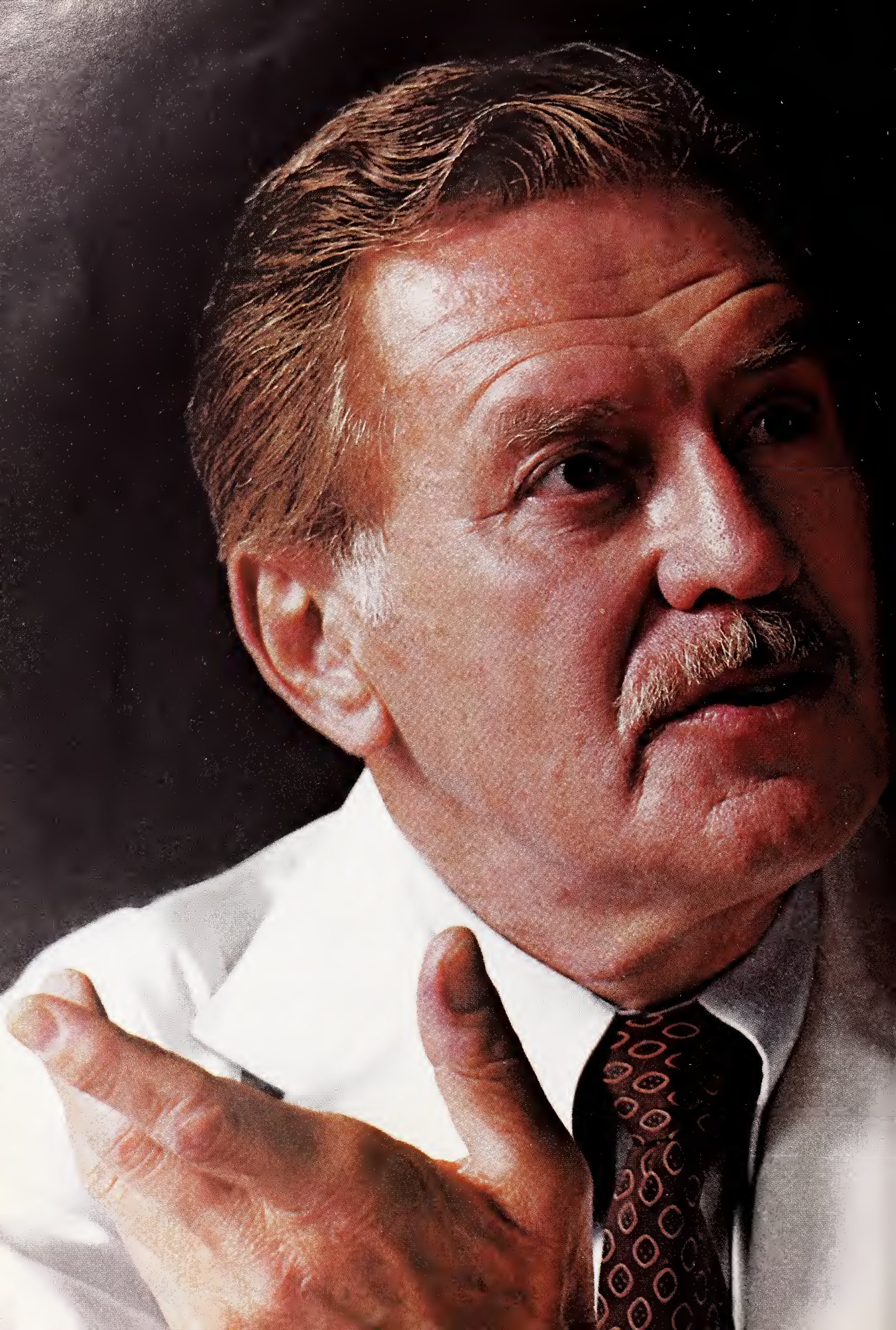
EO: Many states have passed legislation attempting to help rein in medical malpractice costs. For example, some have dictated ceilings on recovery for pain and suffering. Others have attempted to mandate the use of arbitration, or other alternatives to filing suit.

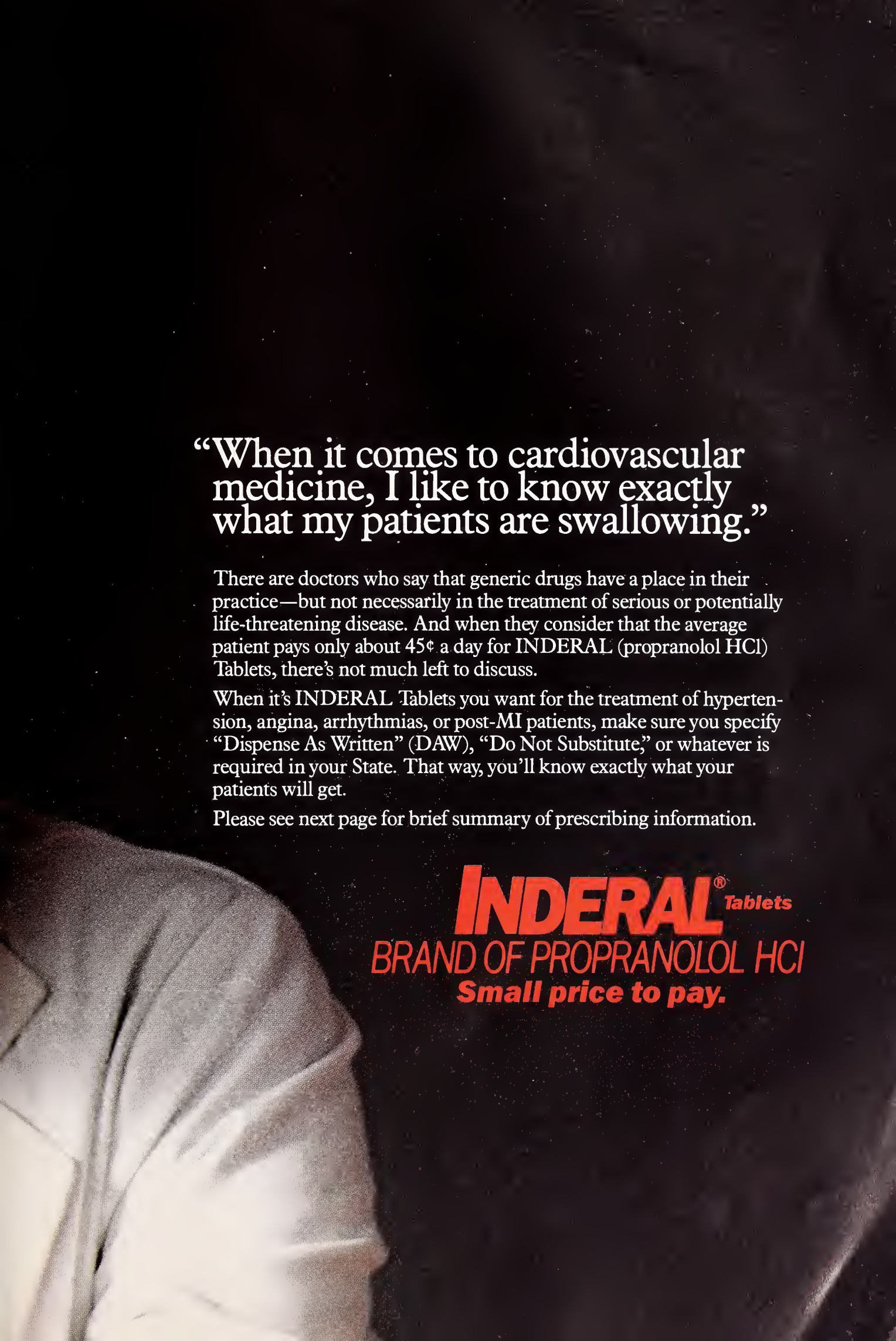
NR: Does this federal bill pre-empt existing state laws and raise constitutional questions?

EO: Yes. Critics of the bill have identified a number of problems, including pre-emption of state law, the likelihood of two malpractice systems in one state, and the constitutionality of cutting off tort liability. Spokesmen for the plaintiffs' bar have expressed fears that the proposal would erode safety incentives for health care practitioners. And those representing the elderly and the poor argue that it discriminates against retirees and others who are not working and so would suffer little or no economic loss.

Commentary. The proposed legislation correctly drew attention to the medical malpractice problem and its possible solutions. However, representatives of the medical and legal communities, insurers and employers, and consumers of health care services have raised serious questions and concerns about the malpractice situation and the need for action and what form it should take.

The 98th Congress referred the bills to committee, but no action was taken before adjournment. Even if the bills are not introduced again in the 99th Congress, these concerns undoubtedly will be readdressed when overall reform of the Medicare program is considered. Physicians should follow this legislation carefully and encourage any new Congressional moves that could help solve the problem of medical malpractice as it contributes to higher costs for health care. *(Washington Briefing,* January 1985)

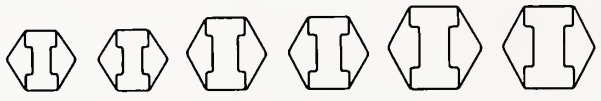



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INDERAL is contraindicated in 1) cardiogenic shock, 2) sinus bradycardia and greater than first degree block, 3) bronchial asthma, 4) congestive heart failure (see WARNINGS) unless the failure is secondary to a tachyarrhythmia treatable with INDERAL.

WARNINGS

CARDIAC FAILURE: Sympathetic stimulation may be a vital component supporting circulatory function in patients with congestive heart failure, and its inhibition by beta blockade may precipitate more severe failure. Although beta blockers should be avoided in overt congestive heart failure, if necessary they can be used with close follow-up in patients with a history of failure who are well compensated and are receiving digitalis and diuretics. Beta-adrenergic blocking agents do not abolish the inotropic action of digitalis on heart muscle.

IN PATIENTS WITHOUT A HISTORY OF HEART FAILURE, continued use of beta blockers can, in some cases, lead to cardiac failure. Therefore, at the first sign or symptom of heart failure, the patient should be digitalized and/or treated with diuretics, and the response observed closely, or INDERAL should be discontinued (gradually, if possible).

IN PATIENTS WITH ANGINA PECTORIS, there have been reports of exacerbation of angina and, in some cases, myocardial infarction, following abrupt discontinuance of INDERAL therapy. Therefore, when discontinuance of INDERAL is planned the dosage should be gradually reduced over at least a few weeks and the patient should be cautioned against interruption or cessation of therapy without the physician's advice. If INDERAL therapy is interrupted and exacerbation of angina occurs, it usually is advisable to reinstitute INDERAL therapy and take other measures appropriate for the management of unstable angina pectoris. Since coronary artery disease may be unrecognized, it may be prudent to follow the above advice in patients considered at risk of having occult atherosclerotic heart disease who are given propranolol for other indications.

Nonallergic Bronchospasm (e.g., chronic bronchitis, emphysema)—PATIENTS WITH BRONCHOSPASTIC DISEASES SHOULD IN GENERAL NOT RECEIVE BETA BLOCKERS. INDERAL should be administered with caution since it may block bronchodilation produced by endogenous and exogenous catecholamine stimulation of beta receptors.

MAJOR SURGERY: The necessity or desirability of withdrawal of beta-blocking therapy prior to major surgery is controversial. It should be noted, however, that the impaired ability of the heart to respond to reflex adrenergic stimuli may augment the risks of general anesthesia and surgical procedures.

INDERAL, like other beta blockers, is a competitive inhibitor of beta-receptor agonists and its effects can be reversed by administration of such agents, e.g., dobutamine or isoproterenol. However, such patients may be subject to protracted severe hypotension. Difficulty in starting and maintaining the heartbeat has also been reported with beta blockers.

DIABETES AND HYPOGLYCEMIA: Beta-adrenergic blockade may prevent the appearance of certain premonitory signs and symptoms (pulse rate and pressure changes) of acute hypoglycemia in labile insulin-dependent diabetes. In these patients, it may be more difficult to adjust the dosage of insulin.

THYROTOXICOSIS: Beta blockade may mask certain clinical signs of hyperthyroidism. Therefore, abrupt withdrawal of propranolol may be followed by an exacerbation of symptoms of hyperthyroidism, including thyroid storm. Propranolol does not distort thyroid function tests.

IN PATIENTS WITH WOLFF-PARKINSON-WHITE SYNDROME, several cases have been reported in which, after propranolol, the tachycardia was replaced by a severe bradycardia requiring a demand pacemaker. In one case this resulted after an initial dose of 5 mg propranolol.

PRECAUTIONS

General: Propranolol should be used with caution in patients with impaired hepatic or renal function. INDERAL is not indicated for the treatment of hypertensive emergencies.

Beta-adrenoreceptor blockade can cause reduction of intraocular pressure. Patients should be told that INDERAL (propranolol hydrochloride) may interfere with the glaucoma screening test. Withdrawal may lead to a return of increased intraocular pressure.

Clinical Laboratory Tests: Elevated blood urea levels in patients with severe heart disease, elevated serum transaminase, alkaline phosphatase, lactate dehydrogenase.

DRUG INTERACTIONS: Patients receiving catecholamine-depleting drugs such as reserpine should be closely observed if INDERAL is administered. The added catecholamine-blocking action may produce an excessive reduction of resting sympathetic nervous activity which may result in hypotension, marked bradycardia, vertigo, syncopal attacks, or orthostatic hypotension.

Carcinogenesis, Mutagenesis, Impairment of Fertility: Long-term studies in animals have been conducted to evaluate toxic effects and carcinogenic potential. In 18-month studies in both rats and mice, employing doses up to 150 mg/kg/day, there was no evidence of significant drug-induced toxicity. There were no drug-related tumorigenic effects at any of the dosage levels. Reproductive studies in animals did not show any impairment of fertility that was attributable to the drug.

Pregnancy: Pregnancy Category C. INDERAL has been shown to be embryotoxic in animal studies at doses about 10 times greater than the maximum recommended human dose.

There are no adequate and well-controlled studies in pregnant women. INDERAL should be used during pregnancy only if the potential benefit justifies the potential risk to the fetus.

Nursing Mothers: INDERAL is excreted in human milk. Caution should be exercised when INDERAL is administered to a nursing woman.

Pediatric Use: Safety and effectiveness in children have not been established.

ADVERSE REACTIONS

Most adverse effects have been mild and transient and have rarely required the withdrawal of therapy.

Cardiovascular: bradycardia; congestive heart failure; intensification of AV block; hypotension; paresthesia of hands; thrombocytopenic purpura, arterial insufficiency, usually of the Raynaud type.

Central Nervous System: Lightheadedness; mental depression manifested by insomnia, lassitude, weakness, fatigue; reversible mental depression progressing to catatonia; visual disturbances; hallucinations; an acute reversible syndrome characterized by disorientation for time and place, short-term memory loss, emotional lability, slightly clouded sensorium, and decreased performance on neuropsychometrics.

Gastrointestinal: nausea, vomiting, epigastric distress, abdominal cramping, diarrhea, constipation, mesenteric arterial thrombosis, ischemic colitis.

Allergic: pharyngitis and agranulocytosis, erythematous rash, fever combined with aching and sore throat, laryngospasm and respiratory distress.

Respiratory: bronchospasm.

Hematologic: agranulocytosis, nonthrombocytopenic purpura, thrombocytopenic purpura.

Auto-Immune: In extremely rare instances, systemic lupus erythematosus has been reported.

Miscellaneous: alopecia, LE-like reactions, psoriasiform rashes, dry eyes, male impotence, and Peyronie's disease have been reported rarely. Oculomucocutaneous reactions involving the skin, serous membranes and conjunctivae reported for a beta blocker (practolol) have not been associated with propranolol.

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EDITORIAL

Medical License: Cherished Possession

FRANK J. MALTA, M.D.*

As a member of the New Jersey State Board of Medical Examiners, the author reminds us of the great privilege accorded those who are licensed to practice medicine.

The seeds of liberty are sown in sacrifice. The privilege to practice medicine is encompassed in professionalism. Once an individual has decided to become a physician, the years ahead are fraught with arduous study, perseverance, and determination in the pursuit of excellence. Acceptance into medical school is a moment of great happiness and elation. A license to practice and the privilege contained therein is far from the mind of the embryonic doctor. As the student develops attitudes and lofty goals by emulating role models, he gradually perceives his identity as a physician.

Medicine today is not the result of contributions by any one individual, but the sum total of history, events, dedication, and contributions by those who came before and who have passed on to the present generation, "la dolce vita."

The public and the individual patient, through centuries of contact with the physician, developed a "doctor-patient" relationship of trust and an acceptance of the unique rapport that has evolved which has led to the high esteem that the medical profession has enjoyed over the years. Out of the doctor-patient relationship, a professionalism resulted and the physician was placed on a pedestal that demanded a high standard of behavior above and beyond that expected of most men and women. The molding of a person with high moral standards and lofty ideals, who strives for excellence through the pursuit of knowledge, an insatiable curiosity, and an impeccable mode of conduct is for the sole purpose of serving the patient. Robert Louis Stevenson aptly described the physician when he wrote, "There are men and classes of men that stand above the common herd: the soldier, the sailor, and the shepherd not infrequently; the artist rarely; rarer still, the clergyman; the physician almost as a rule."

After satisfying the academic requirements, the medical student is granted a degree: doctor of allopathic or osteopathic medicine. After requirements are fulfilled, the state issues a license to practice medicine and surgery to the physician.

The idea that a license to practice medicine and surgery is a privilege still is not given much thought and it probably is expected by most physicians as an "earned right." Each state legislature has defined and determined the qualifications before a medical license is issued. The majority of physicians who become licensed will serve their patients in an exemplary fashion, thereby earning the respect and loyalty of their patients in the tradition of Hippocrates.

Somewhere along the way, a physician may go astray for various reasons: personality problems, mental illness, drug or alcohol abuse and impairment, personal greed, a failure of medical knowledge, overprescribing controlled dangerous substances without valid medical reasons, use of poor judgment, repeated acts of negligence and/or malpractice, and unprofessional conduct. These place the license to practice medicine in jeopardy. State boards of medical examiners are charged by statute with the responsibility of protecting the safety, health, and welfare of the consumers within their state. Given this responsibility, they are accorded broad powers by their legislatures to police the medical profession and to protect the public. As a result of this power, some physicians may feel threatened by the board of medical examiners; a natural tendency to over-react may lead to great concern, and to criticism of board actions. One best can address this through better understanding of the need to protect the public and by cooperating with the impaired physicians committees which can advise rehabilitation techniques. Punitive measures, when appropriate, are defined by state statutes.

Medical societies and professional societies have not been able to fend off consumer movements which have become more vocal and file more complaints, while continuing their tradition of maintaining professionalism and disciplining their members. They do not have the statutory powers to significantly discipline their members other than to reprimand, suspend, or expel them from their organization. They have absolutely no influence on nonmembers. Who, then, must undertake the task of protecting the public, if not the board of medical examiners?

In most instances, actions are initiated by the Board of Medical Examiners on the basis of a complaint filed against a licensee. Due process then is accorded the

*Dr. Malta is a member of the New Jersey State Board of Medical Examiners.

licensee to protect his license. Like freedom, the privilege to practice medicine may not be appreciated until that privilege is in jeopardy or is taken away. In many instances, the failure to maintain one's professionalism in the broadest sense results in the loss of the privilege to practice medicine. Disciplinary measures involve a very small percentage of physicians.

For the past three years, I have been privileged to serve as a member of the New Jersey State Board of Medical Examiners and, at the same time, to maintain an active medical practice. It is most important that Board members are in the active practice of medicine in order that they may understand both the art of medicine and the state of the art. Not a day goes by that I am not reminded of the great privilege that has been accorded to me to be licensed to practice medicine. I have learned to cherish that license.

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J-4044 January 1984

Closed Medical Staff: Legal Challenges

JAMES E. GEORGE, M.D., J.D.

The issue of closed medical staffs has been the subject of continuing controversy in New Jersey.

Two lawsuits involving challenges by physicians who were denied admittance to closed hospital medical staffs are expected to be heard by the Supreme Court of New Jersey in 1985. They are *Berman v Valley Hospital*, 196 N.J. Super. 359 (1984) and *Desai v Saint Barnabas Medical Center*, Docket No. C-1342-81, Essex County.

The issue of closed medical staffs has been the subject of continuing controversy in New Jersey. Some hospitals in the state have adopted closed medical staff policies in order to avoid overcrowding and overutilization in the face of limited bed capacity and in the face of stringent state regulations and requirements for additional beds.

Some critics of the closed medical staff policy contend that it merely is an artful means by which established physicians can avoid competition from other physicians. Advocates of the policy find that it permits hospitals to exercise more effective control over its resources in the interest of maintaining the quality of patient care.

To the individual physician applicant, a closed staff policy may effectively deny the physician access to a hospital in the locality of his choice with resulting economic consequences. Notably, in both of the above lawsuits challenging closed medical staff policies, the litigants are physicians with an urban practice who sought affiliation with a hospital in a more affluent suburban locality. A brief capsulization of the two cases reveals interesting similarities and significant differences between them. In both cases, the competency and professional qualifications of the applicants were not in controversy.

In the Valley Hospital case, two physicians, one a nephrologist and the other a pulmonary medicine specialist, challenged the hospital's 1977 regulation which limited new medical staff appointments to physicians whose offices were located in what the hospital defined as its primary service area. The regulation also provided that physicians who had been in private practice in that defined area for more than two years immediately preceding the date of their applications for staff privileges were ineligible, unless their specialty met a predetermined need at the hospital.

According to the opinion of the Appellate Division of the Superior Court, Valley Hospital justified its policy on the grounds that the hospital faced overcrowding and overutilization in 1977 and had to take action to hold down occupancy rates. The hospital contended that the occupancy problem was partly attributable to the fact that many experienced physicians with large, established practices had transferred their affiliations to Valley Hospital from inner-city hospitals. The hospital concluded that if large numbers of physicians left inner-city hospitals, their viability would be harmed. The new resolution left the door open to new physicians with lighter patient loads and new ideas.

In the suit against Saint Barnabas Medical Center, a physician board certified in internal medicine and gastroenterology challenged the hospital's stated closed staff policy. According to the opinion of the lower court, Saint Barnabas had a closed staff policy since 1969, but nevertheless admitted several hundred physicians to its staff under an exception to the rule. Nearly all physicians who were admitted to the medical staff of the hospital since 1969 were admitted because they had associated themselves with physicians who already were members of the medical staff.

According to the opinion of the lower court, Saint Barnabas was motivated to adopt its closed staff policy in 1969 to avoid overutilization. The court noted that overutilization may prevent the admission of patients who are in great need of services at the hospital. It also noted that supervision of physicians and other professional staff and the quality of patient care may slip. The court also observed that the Commissioner of Health had been cautious in allowing suburban hospitals to create additional or new facilities in light of the marked underutilization of inner-city hospitals.

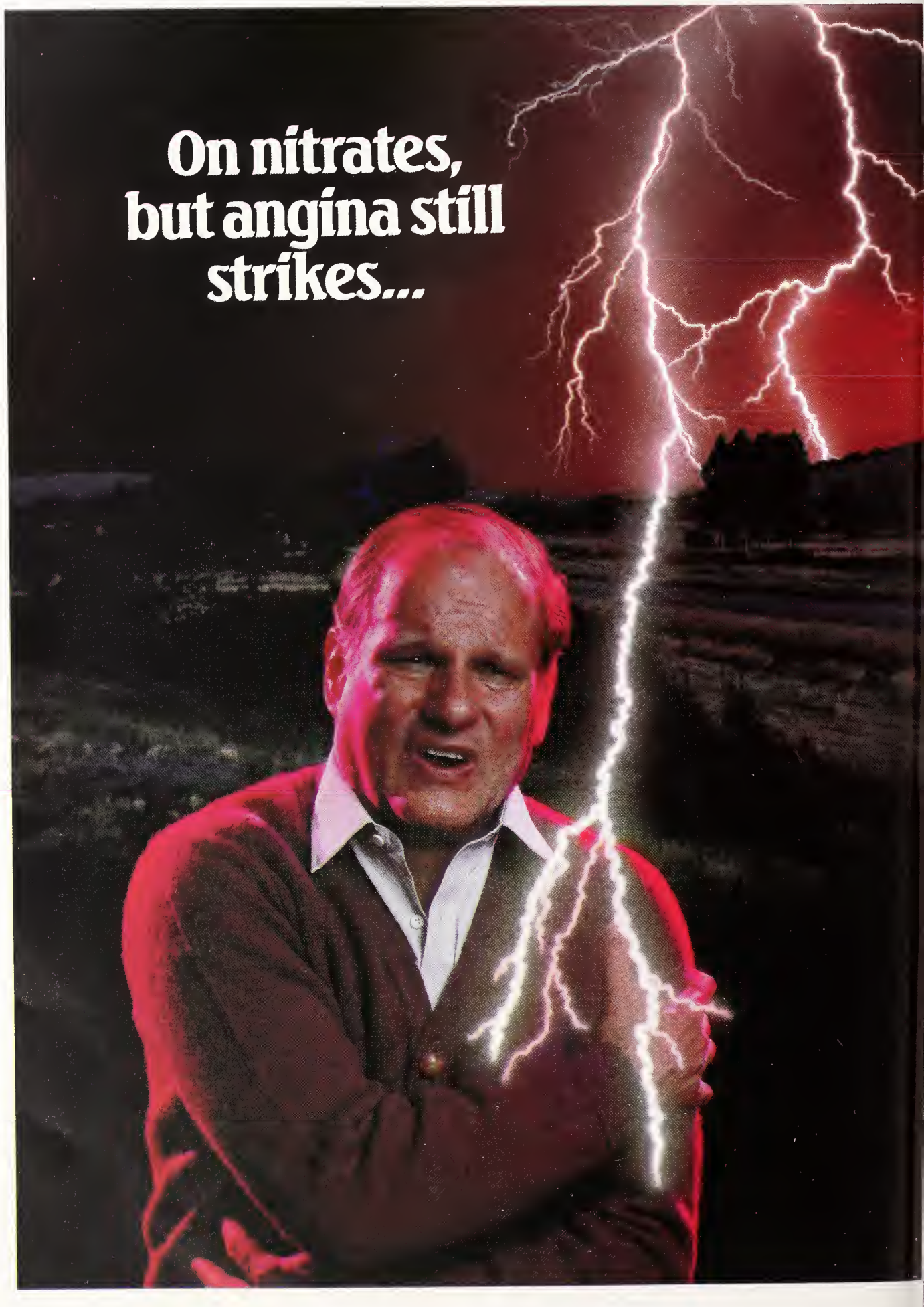
In previous litigation challenging hospital policy, the Supreme Court of New Jersey indicated that a court's review of a hospital decision will be limited to a review of the record of the hearings afforded to the applicant, to ensure that the hospital's decision neither was arbitrary nor capricious and that it rests upon reasonable grounds. In deciding whether the hospital's policy is arbitrary or capricious, courts may examine whether the policy has been implemented fairly and without

*The material for this column is coedited by Arthur Krosnick, M.D., Editor, *The Journal*, MSNJ; Vincent A. Maressa, J.D., Executive Director, MSNJ; and James E. George, M.D., J.D., Director of Professional Liability Control, MSNJ.

discrimination or whether it is wholly unrelated to patient care and the needs of the institution. In deciding whether the policy is reasonable, the court may examine whether or not the policy is effective.

The likelihood of a successful challenge to a hospital's decision to close its staff depends on the specific facts of each case. If the hospital and medical staff have enacted procedurally fair and reasonable bylaws, rules, and regulations and have abided by them, the hospital's decision probably will be upheld in court if it is reasonable and sensible and applied in a fair manner. An aggrieved physician may be successful in court if a judicial review of the record of the hospital's procedures and policy shows unfairness or that the criteria upon which the hospital based its decision are against public policy or otherwise invalid.

The courts in New Jersey have recognized that hospital staff membership has significant economic consequences to most physicians. On the other hand, the courts generally have permitted private hospitals a large measure of reasonable discretion. Given the economic climate of the times, physicians and hospitals can expect that attention will be focused on the opinions of the Supreme Court of New Jersey.


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RESEARCH IN THE PHYSIOLOGY OF EXERCISE AND SPORTS*

By Max M. Novich, M.D.**

The common thread that runs throughout sports, be it recreational or competitive, is physical activity. This may be static, dynamic, kinetic, or therapeutic; it may range from bicycling to ballet to boxing. The physiology of exercise concerns the interrelationship of the parts of the body and their functions under the stress of exertion. Sports medicine is the application of scientific information from the many branches of clinical medicine, dentistry, basic and applied physiology, physical education, and other allied health sciences to the study and promotion of human physical performance.[1-2]

Sports medicine is not the exclusive domain of the medical profession. The American College of Sports Medicine uses 36 primary occupational codes for its membership, starting with anatomists and ending with veterinarians. All have academic credentials and experience that qualify them to render some component service of sports medicine.

THE BEGINNING OF SPORTS MEDICINE

Scientific inquiry into the nature and scope of human performance has been conducted since ancient times. Galen, born in Pergamos in 201 B.C., "recorded more fundamental contributions to exercise physiology than any physician before or since and is aptly called the father of sports medicine."[3,4] Hippocrates was aware of muscular atrophy in patients who could not move their limbs. He recognized the relationship between motion and muscles, and the need for exercise to strengthen weakened muscles. Weightlifters of ancient Greece were able to hypertrophy their muscles by lifting progressively heavier loads using a "Halter" that resembled modern dumbbells and was weighted with lead. The most important contribution of the ancient Greeks to our modern understanding of sports medicine came by way of the reinstitution of the Olympic Games by Baron Pierre de Coubertain in 1896, which gave scientists tremendous impetus to explore human athletic performance, exercise, physical education, and sports.

The words, "citius, altius, fortius," which appear under the Olympic symbol, originally meant "faster, higher, and braver," but this translation has been modernized to "swifter, higher, and stronger." Athletes and athletic advisory personnel always have been aware that training and conditioning are necessary to improve their skill, strength, speed, and endurance. Nonetheless, many biochemical, biophysical, biomechanical, and neurological factors limit athletic performance; research into these areas is improving our understanding of exercise physiology. As each answer to a problem hindering athletic performance was discovered, other investigators used the information to solve other problems, and these advances then were applied not only to athletics, but to human health in general.

Most early discoveries and contributions in exercise physiology were made by European physicians: Mosso of Italy, Zunts of Germany, Lindhard of Denmark, Marey of France, Kroenecker of Switzerland, Krestownikow of Russia, and Buytendijk and I. Snapper of Holland. The European research was conducted on a small scale by individual investigators or by small teams of investigators, most of whom were athletes

*This is the second part of a state-of-the-art article on sports medicine. Part 1 appeared in the April 1982 issue of *The Journal*.

**Dr. Novich is Clinical Professor of Surgery, UMDNJ-New Jersey Medical School and Founder and Director of Sports Medicine, United Hospitals Orthopedic Center, Newark. Correspondence may be addressed to Dr. Novich, 313 State Street, Perth Amboy, NJ 08861.

with some intimate knowledge of a particular sport. Using biomedical and biophysical concepts, concerning metabolism, temperature regulation, cardiac stroke volume, hematology, and electrocardiography, these scientists worked out sports-related scientific data using their knowledge of the sport and procedural know-how. In 1914, Dr. J. Barcroft of England published a monumental work in the study of exercise physiology entitled, *The Respiratory Functions of the Blood.* R. Tait McKenzie, a Canadian physician who later became affiliated with the University of Pennsylvania, published a book entitled, *Exercise in Education and Medicine,* in 1909; McKenzie was more involved with physical education than with the practice of medicine.

In the United States, a "fatigue laboratory" was established in 1924 at Harvard University. Drs. L.J. Henderson, Bruce Dill, Arlie V. Bock, Sid Robinson, Yandell Henderson, and John Talbott, who later became the editor of the *Journal of the American Medical Association,*[5] were among the first to work there. Research at the Fatigue Laboratory was oriented toward physiology and biochemistry. Some research centered around environmental extremes, such as the physiological effects of cold weather and high altitudes on body metabolism, and metabolic diseases. Dill and Bock later rewrote Bainbridge's 1931 edition of *Physiology of Muscular Exercise,* which incorporated the newest European and Harvard concepts of exercise physiology. The Fatigue Laboratory continued to operate until 1942.[6]

The biophysical research of Drs. A.V. Hill and O. Meyerhoff on the isolated muscle of the frog earned these investigators a Nobel Prize in Medicine and Physiology in 1923. Their work propelled and embellished the research and application of this knowledge, which became useful not only for athletes but also for the general population. In 1925, Hill gave a presidential address before the section of physiology of the British Associations titled, "The Physiological Basis of Athletic Records." His address established not only high standards of scientific study of athletics for future investigators, but also was the forerunner for two future monographs entitled, *Living Machinery* and *Muscular Movement in Man.* These monographs have as much relevance today as they did when first published, and serious students of physiology as well as students of sports medicine are encouraged to review them.

With this giant step forward, additional basic research was undertaken to reveal additional secrets still locked in the muscle.

MUSCLE STRUCTURE, FUNCTION, AND CONTROL

The composition of human muscle is slightly more than 70 percent water and 22 percent protein. It contains millions of strands of protein filaments, some of which are called actin (a thin-strand protein) and others called myosin (a thicker-strand protein). These filaments form myofilaments, which successively enlarge into myofibrils, muscle fibers, and muscle

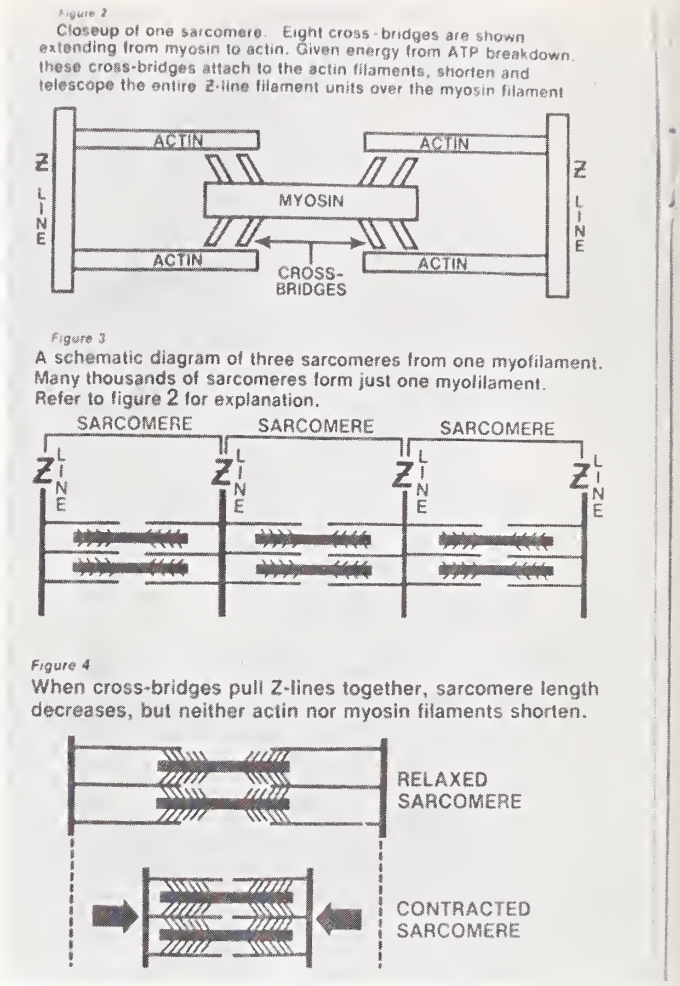


Figure 1—Muscle structure, function, and control.[7]

fasciculi, or bundles of muscle fibers. A myofibril contains many thousands of sarcomeres that are specific units between adjacent Z lines. These sarcomeres contract and shorten muscles on stimulation from the nervous system. The actin and myosin filaments lie alongside each other and are spaced so that they can slide past each other. Contained within these protein filaments are other protein filaments called troponin and tropomyosin. In addition to these elements, calcium and magnesium also must be present for muscle contraction to occur. When a muscle is stimulated, calcium is released from the cells and the protein actin and myosin undergo a "conformational change"[7] (Figure 1), causing a cross-bridge from the myosin filament to hook onto the actin filament, which pulls the actin filament towards it and makes the muscle fiber shorten or contract. The force and velocity of the contraction depends on the available energy and motivation. The biochemistry in this activity depends on a chemical compound called adenosine triphosphate (ATP). When ATP is metabolized, it loses one of its high-energy phosphate bonds, becoming adenosine diphosphate (ADP). The release of the energy causes the previously described cross-bridge to release or unhook from the actin filament; it is recycled for the next contraction. This is essentially the "sliding filament theory" of muscle contraction, the biochemical process of which was discovered by British physiologists, H.E.

and A.F. Huxley.[8]

The energy required for muscle contraction is produced by aerobic and anaerobic metabolic pathways. Aerobic metabolism was explained by Sir Hans Krebs, a physician who originally was trained in otolaryngology but preferred to work in biochemistry and physiologic research. He developed the citric acid cycle, now popularly known as the Krebs cycle.[9] This constitutes a sequential series of nine major enzymatic chemical reactions occurring in the mitochondrion of cells, which provides energy from the oxidation of glucose, fatty acids, and amino acids. It must occur in the presence of adequate oxygen to oxidize the available carbohydrates to CO_2 and water. This usually happens when the exercise is of submaximal intensity, and such exercise is known as aerobic exercise. Krebs was awarded a Nobel Prize in Medicine and Physiology in 1953 for this monumental work.[10]

When the demand for energy exceeds the availability of oxygen, glycogen is broken down anaerobically. Exercises of near-maximal intensity, such as sprinting, high jumping, shot putting, cross-country skiing, and others that produce exhaustion quickly, use anaerobic pathways to maintain function. Creatine phosphate, a chemical stored in muscles, like ATP, supplies energy for muscular work. Creatine phosphate is called upon for quick energy in anaerobic metabolism during an all-out work effort, but it is depleted in about 30 to 45 seconds. This creates a local "oxygen debt" which is repaid when the cardiopulmonary system is able to transport sufficient oxygen and other nutrients to the fatigued muscles. Oxygen, in combination with the residual chemical substrates, corrects the oxygen deficit; waste metabolites also are removed. Rudolf Margaria, of Italy, an early alumnus of the Harvard Fatigue Laboratory, worked out the reconstitution of creatine phosphate in the recovery from exercise in 1932. Margaria's major contribution concerned the formation and removal of lactic acid in the recovery phase from muscular fatigue. His interest in anaerobic metabolism stimulated him to develop a "step test" that still is used in some laboratories to measure anaerobic work potential.

In the past, coaches and physical educators were unable to explain differences in athletic capabilities, excluding the performer's skills and motivation. Why were some track athletes better at distance events than sprint events? Why were some swimmers better at long distance and others at short distance completion? This research in muscle physiology explored why some athletes had a capacity to move more quickly than others. Why could an athlete like boxing champion Sugar Ray Leonard move his hands with such incredible speed whereas others could not? Percutaneous needle biopsy has shown various types of muscles may account for these differences.[11,12]

Earlier classifications labeled muscle types as red, slow twitch muscle fibers (type I) and white, fast twitch muscle fibers (type II). Athletes with a higher ratio of type I to type II fibers perform better in endurance events, whereas athletes with a higher ratio of type II to type I fibers are better suited for events requiring great speed over shorter distances.

A classification of four basic fiber types that determine force of contraction, speed of contraction, and endurance was developed. These four fiber types are seen in most muscles, but their percentages differ (Figure 2): type I (slow, oxidative)—aerobic—endurance fibers with oxygen-storing capacity, and these do not hypertrophy; type II (fast, oxidative)—fast, fatigue-resistant—all these fibers act sequentially—fast and powerful—high endurance capability yet not the long-term endurance of type I; type II AB (fast, oxidative, and glycolytic) fast-intermediate fatigability; and type II B (fast, glycolytic) fast, fatigable—powerful sprint fibers that fatigue most quickly.

Fundamental to an understanding of exercise physiology is a knowledge of how the central and peripheral nervous systems precisely govern the muscles. Commands originate in the frontal cortex. Movements are initiated and coordinated in the basal ganglia, midbrain, and cerebellum, then are relayed through the thalamus to the motor cortex, with final commands proceeding downward into the spinal cord and thence to the muscle groups. The message of the brain centers is transmitted to the muscle through the motor neuron. The motor neuron turns on the muscle it governs in an "all or nothing" manner depending on the one or as many as several hundred muscle fibers it controls. The fiber is either "on" or "off" with no intermediate stages.

Table 1

THREE CLASSIFICATION SCHEMES

THE FOUR FIBER TYPES			
I	SLOW, OXIDATIVE	—S—	SLOW
II_A	—FO— FAST, OXIDATIVE	—FR—	FAST, FATIGUE RESISTANT
II_{AB}	-FOG- FAST, OXIDATIVE PLUS GLYCOLYTIC	—FI—	FAST, INTERMEDIATE FATIGABILITY
II_B	—FG— FAST, GLYCOLYTIC	—FF—	FAST, FATIGABLE

Figure 2—Muscle structure, function, and control classification schemes.[7]

When the "on" stage is inadequate for the immediate need, more energy is obtained by increasing the frequency of stimulation of the fibers already turned on and also by recruitment of additional fibers of the same type. Recruitment of larger and/or more powerful fiber types enables a greater force application. With the body's usual efficiency, muscle fibers are called into service based upon the specific workload to which these specific fibers respond. This is called fiber recruitment. Athletic endeavors that require great power and speed will evoke the response of all four types of muscle fibers, the weakest to the strongest.

The presence of these muscle types is determined genetically. All muscular activities are dependent on combinations of oxidative and glycolytic fueling. The higher the intensity of the athletic activity, the more glycolytic the muscular activity becomes. The lesser the intensity, the more oxidative the muscular activity becomes. For instance, the longer an athlete has to perform, as in a marathon, cross-country skiing, long-distance cycling, or other endurance activity, the more aerobic (oxidative) is his activity, using a higher ratio of slow twitch muscle fibers. The higher the intensity of the activity, such as in sprinting or shot putting, the more anaerobic (glycolytic) the activity becomes.

STRENGTH AND ENDURANCE TRAINING

Muscles, like other organs in the body, react and adapt to the stress to which they are subjected. Muscles are able to handle stress in many ways: by making physiologic changes in their sizes, shape, and chemical composition, by increasing the number of mitochondria, and by increasing the number of functioning capillaries.[12] Coaches and physical educators can apply this scientific principle to the improvement of athletic performance. Strength, speed, and endurance were found to be directly related to the demands placed upon the muscle, its oxygen consumption, and cardiovascular activity. Dr. Thomas DeLorme, a former weightlifter, developed progressive resistance exercises, which earned him a Legion of Merit Citation during World War II for the rehabilitation of injured military personnel.[13,14] However, it was in track that most of the research by exercise physiologists and physicians was done and physiologic principles were developed.

The Germans had for many years developed the concept of interval training to improve speed and endurance in trackmen.[15] This is a method of overloading the athlete by the use of interspersing aerobic and anaerobic exercises, developing multiple states of high oxygen debt. The athlete runs a prescribed course in a specified time for a prescribed number of times; fast runs are interspersed with short recovery periods of jogging. The oxygen debt is repaid by deep breathing after the exercise or activity is over. The athlete increases his endurance by progressively stressing the cardiopulmonary system.

A more popular type of interval training is circuit training, in which muscular strength and endurance, flexibility, and cardiovascular endurance are developed. This is designed for a maximal overall balanced development. It is a system of scientifically arranged and proved exercises performed systematically and repeatedly as a circuit, then repeated twice more as a circuit. These exercises are strenuous and should be done at the end of a training session for no more than 20 minutes.

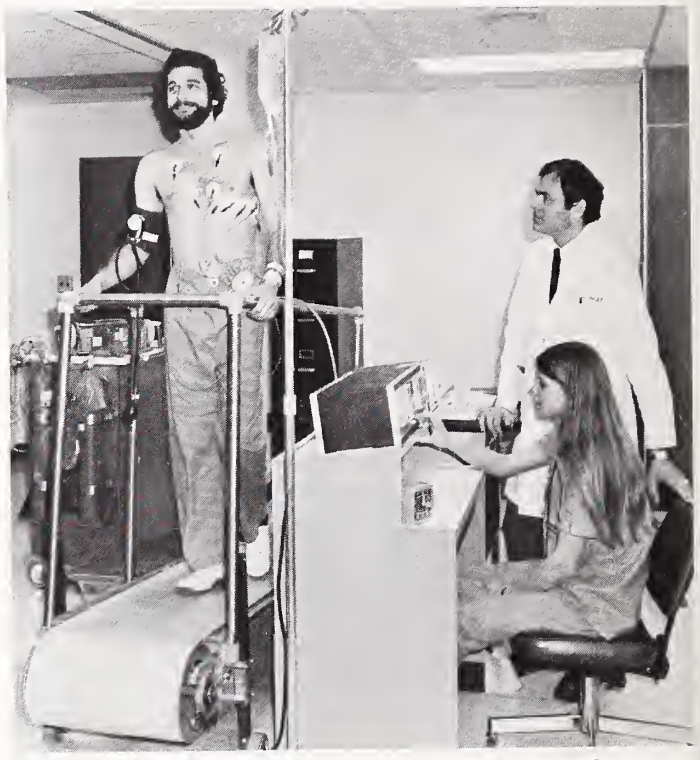


Figure 3—Cover of *The Journal*, Medical Society of New Jersey, May 1982.

Dr. Roger Bannister used such scientific information to break the 4-minute mile barrier in 1954 with a 3:59.4 performance; the prior record of 4.56 was held for 90 years by Charles Lawes of Britain. Numerous track records were made thereafter. Sebastian Coe, the 1980 Olympic Gold Medalist and a devotee of circuit training, set the last world record in 1982 at 3:47:33.

Because athletes, physical educators, and coaches were aware that strength of muscles played a key role in athlete performance, training equipment was developed that would increase the strength of long muscles of the upper and lower extremities and the torso and lead to greater speed and endurance. From DeLorme's progressive resistive exercise concept, it took about ten years before a whole new generation of strength training equipment appeared. Nautilus® and Universal® equipment highlighted the isotonic concept of resistive exercise, which overcomes a constant load through a full range of motion. The Cybex® and Orthotron® machines exemplify an isokinetic concept of resistive exercises. They appeared in the middle 1960s and eliminated the need to handle free weights manually.[16] They have automatic resistance regulators that increase the workload as a function of speed, which can be held constant. Exercise through isokinetic contractions also is called accommodating resistance exercise. Some machines feature computer printouts for

measuring their physiologic profile and/or improvements achieved in therapeutic usage. These machines, which can measure a single muscle or muscle group, now are used for most sports. Boxing, which physically is demanding, has not kept up with these 20th century improvements in training and conditioning, yet ironically it was one of the first sports to use the weight training principle with stationary wall pulleys. These now are practically obsolete in most boxing gymnasiums.

ROLE OF NUTRITION

Another area of research in exercise physiology was the value of nutrition in muscular performance. Again, the percutaneous needle biopsy proved to be a useful tool in the understanding of the role of carbohydrate, protein, fat, and minerals in metabolism. For years, the "protein myth" had held that protein was the food of choice for muscular endurance. It was Astrand, using cross-country skiing experiments, who showed that carbohydrate, not protein, was the food of choice for energy.[17] Carbohydrate "loading"[11] then became the trend in feeding athletes to get maximum performance, although this concept now has been altered somewhat so that carbohydrates and fat are used together. Nonetheless, the use of protein has not subsided entirely, because weightlifters and athletes in field events still prefer it for energy despite the conclusive evidence that carbohydrates and fats are better reservoirs of energy. Many of these athletes, unfortunately, also ascribe to the use of anabolic steroids, which produce muscle bulk and an illusion of increased strength, despite their well-known hazards.

SPORTS MEDICINE IN THE COMPUTER AGE

To achieve their goal of perfection, athletes need effective coaching. In addition to motivating the athlete, the degree of coaching ability depends on the coach's experience. He must be able to correct the athlete's biomechanical inefficiencies. In the past, the coach had little or no scientific equipment to guide him in this respect, but this has changed.

Coaches have been using playback recorders for at least three to four years. Both the athlete and coach can watch and correct biomechanical flaws in athletic performance. Gideon Ariel at the Coto Research Center employs modern computer technology to study and improve human motion. This has opened new horizons to coaches to refine an athlete's performance. Ariel and his group have developed a computer system of improving performance that is significantly more successful than the educated guesswork of coaches. It is done in the following manner: "An athlete is filmed by high-speed cameras from two or more angles. The films are projected on a digitizing screen and the limbs are traced, frame by frame, with a special magnetic pen. This information is processed by a computer using software by Ariel and his associates. After the computer has finished with the two-dimensional tracings fed into it, it produces simulated three-dimensional stick men on a graphics terminal. From these, Ariel and the computer can quantify biomechanical variables such as forces, angles, velocities, and distances that affect an athlete's performance."[18] This information enables an analyst to study a number of simulated changes in technique on a graphic terminal and determine its value on an athlete's performance. Ariel and his group have chalked up an impressive record of significant successes, especially by the United States women's volleyball team, which had been a consistent loser for years and now is the best in the world. The 1984 Olympics were a testing ground for use of computers.

CONCLUSION

The state of the art of "getting into shape" today is far different from the 1920s when the late body builder Charles Atlas was huckstering his dynamic tension cables to 98-pound weaklings. Now, treadmills have become the piece of equipment used most frequently to test a person's cardiovascular fitness and many physicians have them in their offices (Figure 3).[19] From the ancient Greeks to the European physiologists who made contributions early in this century, science has played an important role in sports. Now, more research in sports medicine is being conducted in the United States than in any other country in the world.

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ONCE-DAILY CONTROL WITH HEART-SAVING BENEFITS

By reducing heart rate and cardiac contractility, INDERAL LA helps protect the heart from the potentially serious and debilitating consequences of ischemia. A highly effective antianginal agent for around-the-clock control of symptoms, INDERAL LA also provides cardiovascular protection for a sense of security in the years ahead.

PROTECTION AND EXPERIENCE NO CALCIUM BLOCKER CAN MATCH

Unlike calcium blockers, INDERAL LA—either alone or with a nitrate—is recommended for early treatment of angina in the majority of patients. Equally important, INDERAL LA delivers the proven performance and safety profile of INDERAL tablets—confirmed by millions of patients during 16 years of clinical use.

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Dosage may be increased to 160 mg once daily, as needed, to achieve optimal control. INDERAL LA should not be used in congestive heart failure, sinus bradycardia, cardiogenic shock, heart block greater than first degree, and bronchial asthma. Please see next page for further details and brief summary of prescribing information.

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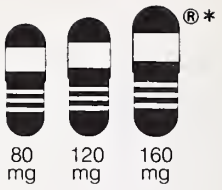
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80 mg 120 mg 160 mg

BRIEF SUMMARY *(FOR FULL PRESCRIBING INFORMATION, SEE PACKAGE CIRCULAR.)*
INDERAL® LA brand of propranolol hydrochloride **(Long Acting Capsules)**
DESCRIPTION. Inderal LA is formulated to provide a sustained release of propranolol hydrochloride. Inderal LA is available as 80 mg, 120 mg, and 160 mg capsules.
CLINICAL PHARMACOLOGY. INDERAL is a nonselective beta-adrenergic receptor blocking agent possessing no other autonomic nervous system activity. It specifically competes with beta-adrenergic receptor stimulating agents for available receptor sites. When access to beta-receptor sites is blocked by INDERAL, the chronotropic, inotropic, and vasodilator responses to beta-adrenergic stimulation are decreased proportionately.

INDERAL LA Capsules (80, 120, and 160 mg) release propranolol HCl at a controlled and predictable rate. Peak blood levels following dosing with INDERAL LA occur at about 6 hours and the apparent plasma half-life is about 10 hours. When measured at steady state over a 24-hour period the areas under the propranolol plasma concentration-time curve (AUCs) for the capsules are approximately 60% to 65% of the AUCs for a comparable divided daily dose of INDERAL tablets. The lower AUCs for the capsules are due to greater hepatic metabolism of propranolol, resulting from the slower rate of absorption of propranolol. Over a twenty-four (24) hour period, blood levels are fairly constant for about twelve (12) hours then decline exponentially.

INDERAL LA should not be considered a simple mg for mg substitute for conventional propranolol and the blood levels achieved do not match (are lower than) those of two to four times daily dosing with the same dose. When changing to INDERAL LA from conventional propranolol, a possible need for retitration upwards should be considered especially to maintain effectiveness at the end of the dosing interval. In most clinical settings, however, such as hypertension or angina where there is little correlation between plasma levels and clinical effect, INDERAL LA has been therapeutically equivalent to the same mg dose of conventional INDERAL as assessed by 24-hour effects on blood pressure and on 24-hour exercise responses of heart rate, systolic pressure and rate pressure product. INDERAL LA can provide effective beta blockade for a 24-hour period.

The mechanism of the antihypertensive effect of INDERAL has not been established. Among the factors that may be involved in contributing to the antihypertensive action are (1) decreased cardiac output, (2) inhibition of renin release by the kidneys, and (3) diminution of tonic sympathetic nerve outflow from vasomotor centers in the brain. Although total peripheral resistance may increase initially, it readjusts to or below the pretreatment level with chronic use. Effects on plasma volume appear to be minor and somewhat variable. INDERAL has been shown to cause a small increase in serum potassium concentration when used in the treatment of hypertensive patients.

In angina pectoris, propranolol generally reduces the oxygen requirement of the heart at any given level of effort by blocking the catecholamine-induced increases in the heart rate, systolic blood pressure, and the velocity and extent of myocardial contraction. Propranolol may increase oxygen requirements by increasing left ventricular fiber length, end diastolic pressure and systolic ejection period. The net physiologic effect of beta-adrenergic blockade is usually advantageous and is manifested during exercise by delayed onset of pain and increased work capacity.

In dosages greater than required for beta blockade, INDERAL also exerts a quinidine-like or anesthetic-like membrane action which affects the cardiac action potential. The significance of the membrane action in the treatment of arrhythmias is uncertain.

The mechanism of the antimigraine effect of propranolol has not been established. Beta-adrenergic receptors have been demonstrated in the pial vessels of the brain.

Beta receptor blockade can be useful in conditions in which, because of pathologic or functional changes, sympathetic activity is detrimental to the patient. But there are also situations in which sympathetic stimulation is vital. For example, in patients with severely damaged hearts, adequate ventricular function is maintained by virtue of sympathetic drive which should be preserved. In the presence of AV block, greater than first degree, beta blockade may prevent the necessary facilitating effect of sympathetic activity on conduction. Beta blockade results in bronchial constriction by interfering with adrenergic bronchodilator activity which should be preserved in patients subject to bronchospasm.

Propranolol is not significantly dialyzable.
INDICATIONS AND USAGE. Hypertension: INDERAL LA is indicated in the management of hypertension; it may be used alone or used in combination with other antihypertensive agents, particularly a thiazide diuretic. INDERAL LA is not indicated in the management of hypertensive emergencies.

Angina Pectoris Due to Coronary Atherosclerosis: INDERAL LA is indicated for the long-term management of patients with angina pectoris.

Migraine: INDERAL LA is indicated for the prophylaxis of common migraine headache. The efficacy of propranolol in the treatment of a migraine attack that has started has not been established and propranolol is not indicated for such use.

Hypertrophic Subaortic Stenosis: INDERAL LA is useful in the management of hypertrophic subaortic stenosis, especially for treatment of exertional or other stress-induced angina, palpitations, and syncope. INDERAL LA also improves exercise performance. The effectiveness of propranolol hydrochloride in this disease appears to be due to a reduction of the elevated outflow pressure gradient which is exacerbated by beta-receptor stimulation. Clinical improvement may be temporary.
CONTRAINDICATIONS. INDERAL is contraindicated in 1) cardiogenic shock; 2) sinus bradycardia and greater than first degree block; 3) bronchial asthma; 4) congestive heart failure (see WARNINGS) unless the failure is secondary to a tachyarrhythmia treatable with INDERAL.
WARNINGS. CARDIAC FAILURE: Sympathetic stimulation may be a vital component supporting circulatory function in patients with congestive heart failure, and its inhibition by beta blockade may precipitate more severe failure. Although beta blockers should be avoided in overt congestive heart failure, if necessary, they can be used with close follow-up in patients with a history of failure who are well compensated and are receiving digitalis and diuretics. Beta-adrenergic blocking agents do not abolish the inotropic action of digitalis on heart muscle.

IN PATIENTS WITHOUT A HISTORY OF HEART FAILURE, continued use of beta blockers can, in some cases, lead to cardiac failure. Therefore, at the first sign or symptom of heart failure, the patient should be digitalized and/or treated with diuretics, and the response observed closely, or INDERAL should be discontinued (gradually, if possible).

IN PATIENTS WITH ANGINA PECTORIS, there have been reports of exacerbation of angina and, in some cases, myocardial infarction, following abrupt discontinuance of INDERAL therapy. Therefore, when discontinuance of INDERAL is planned the dosage should be gradually reduced over at least a few weeks, and the patient should be cautioned against interruption or cessation of therapy without the physician's advice. If INDERAL therapy is interrupted and exacerbation of angina occurs, it usually is advisable to reinstitute INDERAL therapy and take other measures appropriate for the management of unstable angina pectoris. Since coronary artery disease may be unrecognized, it may be prudent to follow the above advice in patients considered at risk of having occult atherosclerotic heart disease who are given propranolol for other indications.

Nonallergic Bronchospasm (e.g., chronic bronchitis, emphysema)—PATIENTS WITH BRONCHOSPASTIC DISEASES SHOULD IN GENERAL NOT RECEIVE BETA BLOCKERS. INDERAL should be administered with caution since it may block bronchodilation produced by endogenous and exogenous catecholamine stimulation of beta receptors.

MAJOR SURGERY: The necessity or desirability of withdrawal of beta-blocking therapy prior to major surgery is controversial. It should be noted, however, that the impaired ability of the heart to respond to reflex adrenergic stimuli may augment the risks of general anesthesia and surgical procedures.

INDERAL (propranolol HCl), like other beta blockers, is a competitive inhibitor of beta-receptor agonists and its effects can be reversed by administration of such agents, e.g., dobutamine or isoproterenol. However, such patients may be subject to protracted severe hypotension. Difficulty in starting and maintaining the heartbeat has also been reported with beta blockers.

DIABETES AND HYPOGLYCEMIA: Beta-adrenergic blockade may prevent the appearance of certain premonitory signs and symptoms (pulse rate and pressure changes) of acute hypoglycemia in labile insulin-dependent diabetes. In these patients, it may be more difficult to adjust the dosage of insulin.

THYROTOXICOSIS: Beta blockade may mask certain clinical signs of hyperthyroidism. Therefore, abrupt withdrawal of propranolol may be followed by an exacerbation of symptoms of hyperthyroidism, including thyroid storm. Propranolol does not distort thyroid function tests.

IN PATIENTS WITH WOLFF-PARKINSON-WHITE SYNDROME, several cases have been reported in which, after propranolol, the tachycardia was replaced by a severe bradycardia requiring a demand pacemaker. In one case this resulted after an initial dose of 5 mg propranolol.
PRECAUTIONS. *General:* Propranolol should be used with caution in patients with impaired hepatic or renal function. INDERAL is not indicated for the treatment of hypertensive emergencies.

Beta adrenoreceptor blockade can cause reduction of intraocular pressure. Patients should be told that INDERAL may interfere with the glaucoma screening test. Withdrawal may lead to a return of increased intraocular pressure.

Clinical Laboratory Tests: Elevated blood urea levels in patients with severe heart disease, elevated serum transaminase, alkaline phosphatase, lactate dehydrogenase.

DRUG INTERACTIONS: Patients receiving catecholamine-depleting drugs such as reserpine should be closely observed if INDERAL is administered. The added catecholamine-blocking action may produce an excessive reduction of resting sympathetic nervous activity which may result in hypotension, marked bradycardia, vertigo, syncopal attacks, or orthostatic hypotension.

Carcinogenesis, Mutagenesis, Impairment of Fertility: Long-term studies in animals have been conducted to evaluate toxic effects and carcinogenic potential. In 18-month studies in both rats and mice, employing doses up to 150 mg/kg/day, there was no evidence of significant drug-induced toxicity. There were no drug-related tumorigenic effects at any of the dosage levels. Reproductive studies in animals did not show any impairment of fertility that was attributable to the drug.

Pregnancy: Pregnancy Category C. INDERAL has been shown to be embryotoxic in animal studies at doses about 10 times greater than the maximum recommended human dose. There are no adequate and well-controlled studies in pregnant women. INDERAL should be used during pregnancy only if the potential benefit justifies the potential risk to the fetus.

Nursing Mothers: INDERAL is excreted in human milk. Caution should be exercised when INDERAL is administered to a nursing woman.

Pediatric Use: Safety and effectiveness in children have not been established.
ADVERSE REACTIONS. Most adverse effects have been mild and transient and have rarely required the withdrawal of therapy.

Cardiovascular: bradycardia; congestive heart failure; intensification of AV block; hypotension; paresthesia of hands; thrombocytopenic purpura; arterial insufficiency, usually of the Raynaud type.

Central Nervous System: lightheadedness; mental depression manifested by insomnia, lassitude, weakness, fatigue; reversible mental depression progressing to catatonia; visual disturbances; hallucinations; an acute reversible syndrome characterized by disorientation for time and place, short-term memory loss, emotional lability, slightly clouded sensorium, and decreased performance on neuropsychometrics.

Gastrointestinal: nausea, vomiting, epigastric distress, abdominal cramping, diarrhea, constipation, mesenteric arterial thrombosis, ischemic colitis.

Allergic: pharyngitis and agranulocytosis, erythematous rash, fever combined with aching and sore throat, laryngospasm and respiratory distress.

Respiratory: bronchospasm.

Hematologic: agranulocytosis, nonthrombocytopenic purpura, thrombocytopenic purpura.

Auto-Immune: In extremely rare instances, systemic lupus erythematosus has been reported.

Miscellaneous: alopecia, LE-like reactions, psoriasiform rashes, dry eyes, male impotence, and Peyronie's disease have been reported rarely. Oculomucocutaneous reactions involving the skin, serous membranes and conjunctivae reported for a beta blocker (practolol) have not been associated with propranolol.
DOSAGE AND ADMINISTRATION. INDERAL LA provides propranolol hydrochloride in a sustained-release capsule for administration once daily. If patients are switched from INDERAL tablets to INDERAL LA capsules, care should be taken to assure that the desired therapeutic effect is maintained. INDERAL LA should not be considered a simple mg for mg substitute for INDERAL. INDERAL LA has different kinetics and produces lower blood levels. Retitration may be necessary especially to maintain effectiveness at the end of the 24-hour dosing interval.

HYPERTENSION—*Dosage must be individualized.* The usual initial dosage is 80 mg INDERAL LA once daily, whether used alone or added to a diuretic. The dosage may be increased to 120 mg once daily or higher until adequate blood-pressure control is achieved. The usual maintenance dosage is 120 to 160 mg once daily. In some instances a dosage of 640 mg may be required. The time needed for full hypertensive response to a given dosage is variable and may range from a few days to several weeks.

ANGINA PECTORIS—*Dosage must be individualized.* Starting with 80 mg INDERAL LA once daily, dosage should be gradually increased at three to seven day intervals until optimum response is obtained. Although individual patients may respond at any dosage level, the average optimum dosage appears to be 160 mg once daily. In angina pectoris, the value and safety of dosage exceeding 320 mg per day have not been established.

If treatment is to be discontinued, reduce dosage gradually over a period of a few weeks (see WARNINGS).

MIGRAINE—*Dosage must be individualized.* The initial oral dose is 80 mg INDERAL LA once daily. The usual effective dose range is 160-240 mg once daily. The dosage may be increased gradually to achieve optimum migraine prophylaxis. If a satisfactory response is not obtained within four to six weeks after reaching the maximum dose, INDERAL LA therapy should be discontinued. It may be advisable to withdraw the drug gradually over a period of several weeks.

HYPERTROPHIC SUBAORTIC STENOSIS—80-160 mg INDERAL LA once daily.

PEDIATRIC DOSAGE—At this time the data on the use of the drug in this age group are too limited to permit adequate directions for use.

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Malignant Hyperthermia

Idrees Ahmad, M.D., G. Craig Fox, M.D., Norman J. Zeig, M.D., Arnold Bodner, M.D., Livingston*

Malignant hyperthermia is relatively unfamiliar to many physicians. Usage of sodium dantrolene has decreased mortality from 70 to 28 percent. Preoperative prophylaxis and increased recognition of the susceptible patient from a thorough medical history and aggressive preplanned management of the syndrome have contributed to the decline in mortality.

Malignant hyperthermia (MH), a potentially fatal clinical condition usually occurring under anesthesia, is characterized by a paroxysmal hypermetabolic and hyperthermic reaction involving skeletal and cardiac muscles. The most common triggering agents are the potent inhalation agents and some skeletal muscle relaxants. The syndrome rarely may occur with the amide type local anesthetics which commonly are used in the office setting.

It is important that physicians be aware of this somewhat rare condition since prophylaxis and appropriate patient preparation prior to surgery and anesthesia can be lifesaving. The primary care physician may have better access to the family history of MH.

CASE REPORT

We evaluated a three-month-old white female who weighed 6 kg, the night preceding elective surgical repair of a congenital cleft lip. The family history revealed a maternal uncle had died shortly after surgery and a definitive diagnosis of MH had been made. Subsequently, two other family members were shown to be susceptible to MH by positive muscle biopsy.

The family pediatrician saw the patient preoperatively, but did not realize the significance of a familial susceptibility to MH. The family was advised that no special preoperative precautions were necessary for the forthcoming surgery.

The physical examination was within normal limits except for a midline cleft lip. Surgery was postponed in order to plan prophylaxis against MH for this patient, who on the basis of family history was considered to be at risk for the development of MH syndrome intraoperatively. Dantrolene should be administered before, during, and after anesthesia. On her second admission, the infant was given 9 mg dantrolene sodium intravenously (1½ mg/kg) six hours prior to surgery. No other premedication was given. Two 22 gauge intravenous cannulae were placed in the upper extremities, to allow for rapid intravascular access and cooling, if needed. The anesthesia machine was prepared to be free of halogenated anesthetic agents. Copious amounts of ice and iced intravenous solutions and the malignant hyperthermia cart with the necessary emergency drugs to control disturbances in temperature, acid-base balance, and metabolism readily were available.

We monitored the patient with continuous electrocardiogram, automatic recording sphygmomanometer, rectal temperature probe, and precordial stethoscope; during surgery, a heating/cooling blanket was in use. The patient was anesthetized with 4 mg/kg sodium thiopental and 20 mcg/kg fentanyl followed by

*From the Department of Anesthesiology, Saint Barnabas Medical Center, Livingston. Correspondence may be addressed to Dr. Ahmad, Department of Anesthesiology, Saint Barnabas Medical Center, Livingston, NJ 07039.

TABLE 1

Musculoskeletal Disorder in Patients Susceptible to Malignant Hyperthermia

- Short stocky stature
- Bulky muscle with rounded belly
- Muscle hypertrophy
- Atrophied muscle groups
- Muscle cramps
- Kyphoscoliosis
- Strabismus
- Joint hypermobility with spontaneous dislocations
- Hernias
- Club foot
- Pectus carinatum
- Hypoplastic mandible
- Poor dental enamel

TABLE 2

Triggering Agents in Malignant Hyperthermia

1. Inhalation Agents
   Halothane, enflurance, isolfurane, and methoxylfurane
2. Muscle Relaxants
   Succinylcholine, dexamethonium, gallamine, and d-Tubocurarine
3. Local Anesthetics
   All amide including lidocaine, bupivacaine, and mepivacaine; esters such as procaine and tetracaine are safe
4. Premedicants and Other Drugs
   Belladonna alkaloids (atropine), phenothiazines, meperidine, cardiac glycosides, and corticosteroids

0.1 mg/kg pancuronium and intubation. She was maintained on a 1:1 ratio of oxygen and nitrous oxide and an additional 150 mcg of fentanyl in divided doses for the two hours of surgery.

The intraoperative and postoperative course was uneventful. As MH may occur during the postoperative period, the patient was admitted to the intensive care unit for 24 hours continuous monitoring, but never developed any signs of MH.

DISCUSSION

Malignant hyperthermia was described by Denborough and Lovell over 20 years ago in a healthy 21-year-old man with a fracture of his tibia and fibula who came to a hospital in Melbourne, Australia.[1] The patient was more concerned about the risk of anesthesia than the surgery since 10 out of 24 of his close relatives had died either during or shortly after anesthesia. Within ten minutes of commencement of general anesthesia, the patient developed unexplained tachycardia and unstable blood pressure. The surgery and anesthesia immediately were terminated; the patient felt "very hot" for some time afterward. He eventually recovered.

The syndrome of MH has been widely reported in all racial and ethnic groups with an incidence ranging from 1:15,000 among children to 1:50,000 among adults, with a predominance of cases reported in young males. Most cases of MH are nonfamilial but familial autosomal dominant transmission with variable penetrance has been described. In addition to a family history of MH, the susceptible patient may have one of the musculoskeletal disorders listed in Table 1.[2] MH may occur following several uneventful exposures to anesthetics. One such susceptible patient did not develop the syndrome until after her 13th anesthetic.[3]

MH is thought to be triggered by a combination of stress and one of the many triggering agents listed in Table 2.[2,4] Susceptibility is related to the total dose of the triggering agent and to the duration of exposure. The earliest sign is muscle rigidity, noticed in the masseter muscles of the face, followed by tachycardia, tachypnea, and fever (Table 3).[2,4]

Hyperthermia, often the most striking feature of MH, may be absent during the early developmental phase of the syndrome. Once the temperature rise begins, it can be very dramatic, rising as much as 1° to 2°C every five minutes; fever as high as 46°C has been recorded.[5] The increase in temperature initially is due to increased aerobic metabolism and later due to lactate production which accounts for the profound acidosis seen in the syndrome's fulminant state.

The basic defect of MH still is speculative. A currently accepted theory of pathophysiology is a defect lying within the excitation-contraction mechanism of calcium coupling to muscle sarcolemma causing prolonged contraction of muscle thus producing heat through depletion of intramuscular ATP stores.[6] Additional studies of Denborough et al. have reported an increase in sudden infant death cases for families with a history of susceptibility to MH.[7] These deaths have been attributed to a sudden death dysfunction of cardiac muscle, which is thought to result from exposure to nonspecific triggering agents such as cold and stress.[8]

A definitive diagnosis of MH susceptibility is difficult, especially in infants and very young children. Markedly increased CPK levels in these patients as well as their relatives are of diagnostic value but a normal CPK level is of no value, because one-third of the susceptible patients have normal values. Also, the CPK level can be altered by other factors such as stress, muscle injury, exercise, and certain drugs. A skeletal muscle biopsy is more specific for diagnosis of MH: muscle strips are exposed to caffeine, with or without halothane and contracture tension is recorded. Muscle strips from MH-susceptible patients show contracture at much lower concentration in both the caffeine and caffeine plus halothane baths. Recently, halothane-induced ATP depletion in platelets has been developed to test patients at risk of MH, but its reliability needs confirmation with further clinical studies.[4,9] The limited amount of available data for children under the age of four years and the difficulty in assessing the predictive value of screening tests in such a small patient population makes MH prophylaxis with dantrolene sodium mandatory for very young children of MH-susceptible families.[10]

Dantrolene sodium is the only specific agent available for the treatment and prophylaxis of MH. It is a

TABLE 3

Clinical and Laboratory Signs in Malignant Hyperthermia

Clinical Signs	Laboratory Signs
• Tachycardia	• ↓pH due to metabolic and respiratory acidosis
• Tachypnea	
• Cyanosis	• ↓ PO_2
• Arrhythmias	• ↑ K, Ca, Mg
• Unstable blood pressure	• ↓ Na
• Muscle rigidity	• ↑ Lactate and pyruvate
• Fever	• ↑ CPK, LDH, SGOT
• Diaphoresis	• Myoglobinemia
• Skin mottling	• Myoglobinuria

hydantoin derivative and is thought to act by preventing release of calcium in sarcoplasmic reticulum of skeletal muscle. It is considered quite safe in clinical dosage; its only side effect is mild hepatic dysfunction. It is imperative that dantrolene sodium should be administered preoperatively to known susceptible patients or during early development of the MH syndrome while there still is adequate muscle perfusion. Other steps in the treatment of MH are listed in Table 4.[2,11] Essentially, the remainder of the therapy is supportive and is directed towards correcting the assorted metabolic and cardiac abnormalities. Mortality from MH had been reported to be 70 percent prior to 1976. Recent studies showed a reduced mortality at 28 percent, largely attributable to the use of dantrolene sodium and increased awareness of the syndrome by the physicians.[12]

TABLE 4

Management of Malignant Hyperthermia Crisis

1. Discontinue anesthetic and other triggering agents.
2. Hyperventilate with 100 percent oxygen.
3. Infuse dantrolene 1 to 3 mg/kg every 5 to 10 minutes to a total dose of 10 mg/kg.
4. Insert lines: CVP, arterial line (for serial arterial blood gases and BP monitoring); Foley catheter (for urinary output).
5. Aggressive cooling by external (cooling blankets and ice packs) and internal techniques (gastric, rectal, and peritoneal lavage, and cold intravenous solutions).
6. Treat arrhythmias with procainamide 15 mg/kg.
7. Treat acidosis with sodium bicarbonate as indicated by pH.
8. Treat hyperkalemia by using sodium bicarbonate, insulin, and 50 percent dextrose.
9. Maintain urine output with mannitol and furosemide to prevent subsequent renal failure.
10. Continue dantrolene, 1 mg/kg q6h for 72 hours.
11. Monitor patient closely for reoccurrence of reaction.

CONCLUSION

The key to lowering the morbidity and mortality from MH to an absolute minimum lies in recognition of the susceptible patient, proper prophylaxis, early detection of the syndrome if it should occur, and aggressive treatment. The primary care physician is the most knowledgeable concerning the patient's family history. Therefore, the physician can perform a key function by alerting the operating room team about the patient who may be susceptible to the MH syndrome.

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Rationale for Liver Resection for Metastatic Colon Carcinoma

Bernard Gardner, M.D., Hackensack*

Although colon cancer grows rapidly, it does not metastasize readily. Based on these facts, we recommend aggressive surgical treatment with early reoperation in selected cases. The carcinoembryonic antigen (CEA) may help detect recurrences on early, regular followup examinations.

The current trend to more aggressive colon surgery and surgery for metastatic disease is based on clinical evaluation of tumor growth rates and metastatic potential. Early reoperation, as illustrated by a case report, is the essence of a successful result. The use of carcinoembryonic antigen (CEA) determinations facilitates this in most patients.

CASE REPORT

Our patient, a 66-year-old white female, was referred for surgery of metastatic colon cancer in May 1983. She originally was hospitalized in March 1983 with a history of rectal bleeding, due to a sigmoid carcinoma. Preoperative CEA was 28.2 ng/ml (normal value under 4 ng/ml). Blood chemistries were normal, but a liver scan was suspicious for a nodule in the right lobe of the liver. Chest x-ray was normal. At surgery on March 25, 1983, a sigmoid carcinoma was resected, but a suspicious nodule in the liver was not biopsied. Pathology revealed a Dukes C colon cancer (4/13 positive nodes).

A followup CAT scan of the liver revealed two nodules in the right lobe and a negative left lobe. An hepatic angiogram on April 26, 1983, confirmed the findings and elucidated the anatomy with the left hepatic artery arising from the left gastric artery. A repeat CEA on April 25, 1983, was 33.2 ng/ml.

On May 6, 1983, abdominal surgical exploration was performed. No intraperitoneal metastases were seen at this operation other than a large nodule in the right lobe of the liver and a smaller palpable nodule at the junction of the right and middle lobes. The previous anastomosis was examined, and no recurrence was noted. The para-aortic area was visualized; no enlarged nodes were seen.

The subcostal incision was converted into a thoracoabdominal incision, dividing the diaphragm. A right and middle lobe trisegmentectomy was performed (Figures 1 and 2). Gross examination of the specimen revealed two large necrotic nodules diagnosed as metastatic colon carcinoma.

The patient's course was uncomplicated, and she was discharged on postoperative day 13.

At followup examination 13 months later, the patient had regained her strength and full activity; a 15-pound weight gain was noted since discharge from the hospital. CEA was 2.8 ng/ml.

DISCUSSION

Treatment of a solid cancer depends on a knowledge of its growth rate, invasiveness, likely route of spread, sites of recurrence, and sensitivity to chemothera-

*From the Department of Surgery, UMDNJ, Newark, and Hackensack Medical Center. Correspondence may be addressed to Dr. Bernard Gardner, Department of Surgery, Hackensack Medical Center, Hackensack, NJ 07601.



Figure 1—Specimen of right and left medial lobe of the liver.



Figure 2—Cut slice of liver demonstrating two metastatic nodules.

peutic agents and radiotherapy (alternative methods of treatment). Recent evaluations of patients with colon carcinoma have yielded a better understanding of many of these factors.

The determinants of lethality in solid cancers depend on two primary factors: the growth rate of the cancer and its metastatic potential. Colon cancer fits into the category of a rapidly growing cancer which has the following characteristics: 1) short incubation period (rapid doubling time); 2) short free period to recurrence; 3) rare late recurrence; 4) few deaths after three years (postresection)—death rate approaches that of a normal population; and 5) classically, patients deteriorate once recurrence has developed.

It also is a cancer of low metastatic potential as noted by: 1) poor correlation between size of primary tumor and survival, which may correlate better with local aggressiveness and depth of invasion; 2) large massive tumor still may be curable (including direct extension to neighboring organs); 3) usually metastasizes only to a few sites; 4) local recurrences may be resected (or treated) for cure; and 5) success is possible with resection of metastatic lesions.

Clinical studies clearly have established that recurrences of colon cancer are likely to occur within 2 to 3 years of the original resection and very rarely after that time. Five-year survival rates remain constant at 10 and 15 years postresection. Invasiveness remains the primary determinant of survival and is used in all staging systems of the disease. The size of the primary tumor does not correlate with the stage of disease or survival, therefore, aggressive resection of bulky tumors may lead to cures in many cases.[1] Furthermore, involvement of neighboring organs by direct extension does not preclude a cure in this disease as it does with breast cancer, for example.[2-4]

The metastatic potential of this cancer is low, as indicated by its rare appearance outside the abdominal cavity and the success of resection of recurrent disease in many series.[5-7] Chemotherapy has not yielded cures in any cases of recurrent colon cancer. Radiotherapy, while advantageous as an adjuvant to surgery in extending local control, has not been demonstrated to offer more than palliation when recurrence appears.

Wide resection of primary colon cancer to control local and regional disease has yielded significant survival rates, averaging approximately 50 percent at five years. Followup of these patients must be at four- to six-week intervals to insure rapid intervention when recurrence is suspected. If the original cancer was producing carcinoembryonic antigen (CEA), then recurrences can be detected by a spike in the level of CEA on followup.

Since we are dealing with a rapidly growing cancer, it is important that a delay in treatment be avoided. In clinical terms, re-evaluation of the patient and possibly re-exploration is indicated at the earliest time that recurrence is suspected.

This case illustrates the importance of close followup of the colon cancer patient and need for aggressive reoperation when metastases are suspected (assuming the primary remains controlled). The current trend in treatment of hepatic metastases by aggressive resection has yielded an average five-year cure rate of 25 percent.[8-11] Reoperation for control of local recurrence has resulted in a similar survival rate.[6,7] We have performed as many as four operations on one patient with a ten-year survival free of disease. This aggressive treatment is based on the observation that colon cancer does not metastasize readily—a clinical observation guiding a successful treatment scheme. Whether this is due to a failure of the early colon cancer to penetrate the vascular wall, increased adhesiveness of colon cancer cells, or a failure of these cells to be supported adequately in their metastatic sites, is not known at this time.

It is clear, however, that the combination of clinical behavior and the lack of alternative treatment methods has led to the increased use of liver resection in the treatment of colon cancer.

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PRECAUTIONS: General: Severe hypotensive response, particularly with upright posture, may occur with even small doses of SORBITRATE. The drug should therefore be used with caution in subjects who may have blood volume depletion from diuretic therapy or in subjects who have low systolic blood pressure (eg, below 90 mmHg). Paradoxical bradycardia and increased angina pectoris may accompany nitrate-induced hypotension. Nitrate therapy may aggravate the angina caused by hypertrophic cardiomyopathy.

Marked symptomatic, orthostatic hypotension has been reported when calcium channel blockers and organic nitrates were used in combination. Dose adjustment of either class of agents may be necessary.

Tolerance to this drug and cross-tolerance to other nitrates and nitrites may occur. Tolerance to the vascular and antianginal effects of isosorbide dinitrate or nitroglycerin has been demonstrated in clinical trials, experience through occupational exposure, and in isolated tissue experiments in the laboratory. The importance of tolerance to the appropriate use of isosorbide dinitrate in the management of patients with angina pectoris has not been determined. However, one clinical trial using treadmill exercise tolerance (as an end point) found an 8-hour duration of action of oral isosorbide dinitrate following the first dose (after a 2-week placebo washout) and only a 2-hour duration of effect of the same dose after 1 week of repetitive dosing at conventional dosing intervals. On the other hand, several trials have been able to differentiate isosorbide dinitrate from placebo after 4 weeks of therapy and, in open trials, an effect seems detectable for as long as several months.

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Carcinogenesis, Mutagenesis, Impairment of Fertility: No long-term studies in animals have been performed to evaluate the carcinogenic potential of this drug. A modified two-litter reproduction study in rats fed isosorbide dinitrate at 25 or 100 mg/kg/day did not reveal any effects on fertility or gestation or any remarkable gross pathology in any parent or offspring fed isosorbide dinitrate as compared with rats fed a basal-controlled diet.

Pregnancy Category C: Isosorbide dinitrate has been shown to cause a dose-related increase in embryotoxicity (increase in mummified pups) in rabbits at oral doses 35 and 150 times the maximum recommended human daily dose. There are no adequate and well-controlled studies in pregnant women. SORBITRATE should be used during pregnancy only if the potential benefit justifies the potential risk to the fetus.

Nursing Mothers: It is not known whether this drug is excreted in human milk. Because many drugs are excreted in human milk, caution should be exercised when SORBITRATE is administered to a nursing woman.

Pediatric Use: The safety and effectiveness of SORBITRATE in children has not been established.

ADVERSE REACTIONS: Adverse reactions, particularly headache and hypotension, are dose-related. In clinical trials at various doses, the following have been observed.

Headache is the most common (reported incidence varies widely, apparently being dose-related, with an average occurrence of about 25%) adverse reaction and may be severe and persistent. Cutaneous vasodilation with flushing may occur. Transient episodes of dizziness and weakness, as well as other signs of cerebral ischemia associated with postural hypotension, may occasionally develop (the incidence of reported symptomatic hypotension ranges from 2% to 36%). An occasional individual will exhibit marked sensitivity to the hypotensive effects of nitrates and severe responses (nausea, vomiting, weakness, restlessness, pallor, perspiration, and collapse) may occur even with the usual therapeutic dose. Drug rash and/or exfoliative dermatitis may occasionally occur. Nausea and vomiting appear to be uncommon. Case reports of clinically significant methemoglobinemia are rare at conventional doses of organic nitrates. The formation of methemoglobin is dose-related and, in the case of genetic abnormalities of hemoglobin that favor methemoglobin formation, even conventional doses of organic nitrate could produce harmful concentrations of methemoglobin.

DOSAGE AND ADMINISTRATION: For the treatment of angina pectoris, the usual starting dose for sublingual SORBITRATE is 2.5 to 5 mg; for chewable tablets, 5 mg; for oral (swallowed) tablets, 5 to 20 mg, and for controlled-release forms, 40 mg.

SORBITRATE should be titrated upward until angina is relieved or side effects limit the dose. In ambulatory patients, the magnitude of the incremental dose increase should be guided by measurements of standing blood pressure.

The initial dosage of sublingual or chewable SORBITRATE for prophylactic therapy in angina pectoris patients is generally 5 or 10 mg every 2 to 3 hours. Adequate controlled clinical studies demonstrating the effectiveness of chronic maintenance therapy with these dosage forms have not been reported.

SORBITRATE in oral doses of 10 to 40 mg given every 6 hours or in oral controlled-release doses of 40 to 80 mg given every 8 to 12 hours is generally recommended. The extent to which development of tolerance should modify the dosage program has not been defined. *The oral controlled-release forms of isosorbide dinitrate should not be chewed.*

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Case Report: Acute Gastric Volvulus

Jack Yee, M.D., and William A. Dwyer, Jr., M.D., Paterson*

Gastric volvulus is uncommon and results from congenital or acquired intra-abdominal abnormalities. Complications cause a high mortality rate. The condition is suggested by epigastric pain, distension, vomiting, and inability to pass a nasogastric tube. Treatment is immediate decompression, blood and fluid replacement, and surgery.

The stomach normally is well secured in its anatomical position by peritoneal reflections to the spleen, liver, and transverse colon. On rare occasions, these attachments become defective and allow the stomach to rotate and become obstructed. When gastric volvulus occurs, judicious immediate management and, at times, prompt surgical intervention is required. Few surgeons have had experience with this rare condition.

In 1866, Berti was the first to identify this entity.[1] He described an autopsy of a 60-year-old female who had obstruction of both the lower esophagus and the duodenum due to gastric volvulus. Buchanan, Gurnsey and Connolly, and Wastell and Ellis have added more than 200 reported cases to the clinical literature, while Carter et al. analyzed 25 additional cases.[2-5] In the past year, we treated two patients with gastric volvulus.

CASE REPORT 1

A 63-year-old white mentally retarded female came to the emergency room of St. Joseph's Hospital and Medical Center, Paterson, because of episodes of vomiting dark-brown material which was positive for occult blood. She was conscious, pale, and lethargic, but in no acute distress. Blood pressure was 130/80, pulse 120, and temperature 100°F. The abdomen was markedly distended and diffusely tender. Bowel sounds were hyperactive. A huge spleen that reached the iliac crest was felt. Chest and abdominal radiographs revealed marked gastric dilatation (Figure 1), a large mass in the left upper quadrant, and an elevated left hemidiaphragm. Hemoglobin was 12.3 gm/dl and hematocrit 37.5% with a WBC of 8,500. BUN was 52 mg/dl and creatinine 2.6 mg/dl. Hematologic evaluation, including bone marrow study, was negative.

A nasogastric tube was inserted immediately without difficulty and a very large rush of gas and some "coffee ground" material was aspirated. An upper gastrointestinal series showed the stomach to be rotated 180° on its horizontal axis (Figures 2A and 2B). Following decompression, the patient's condition no longer was emergent. With hydration, her hemoglobin and hematocrit drifted down to 6.1 gm/dl and 19.7%, respectively, and BUN and creatinine were 6 mg/dl and 0.9 mg/dl. Following preoperative preparation including blood transfusions, surgery was performed on day 12 and gastric distension due to a mesenteroaxial volvulus was found. The body of the stomach had ulcerated through the splenic hilum and into the spleen, which contained multiple abscess cavities. The stomach also was adherent to the body and tail of the

*From Surgical Services, St. Joseph's Hospital and Medical Center, Paterson, and St. Vincent's Hospital, New York. Correspondence may be addressed to Dr. Dwyer, 412 Park Avenue, Paterson, NJ 07504.

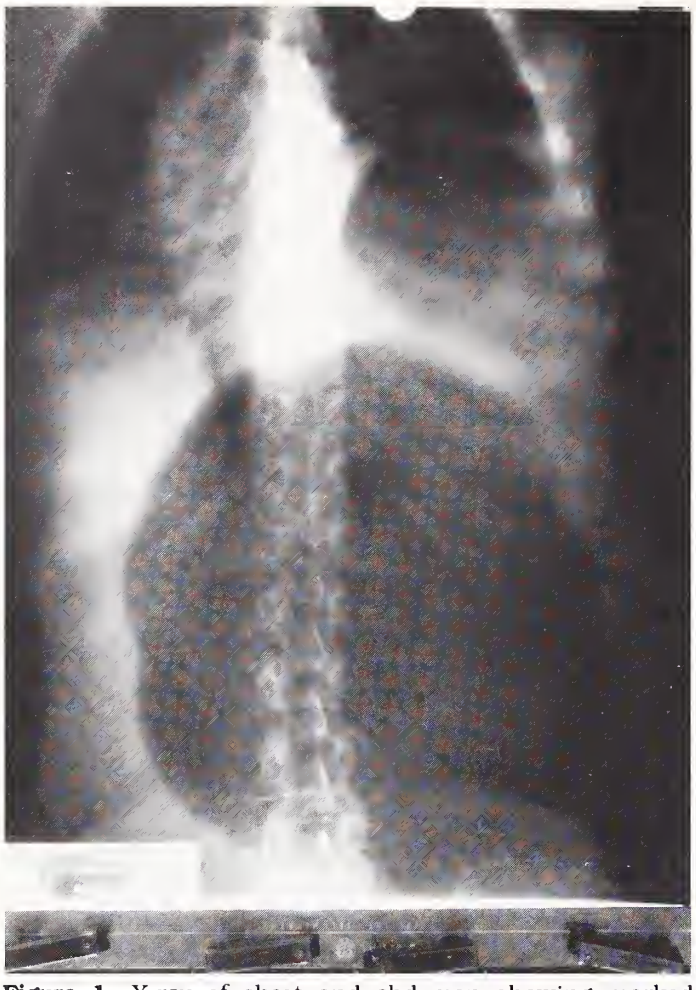
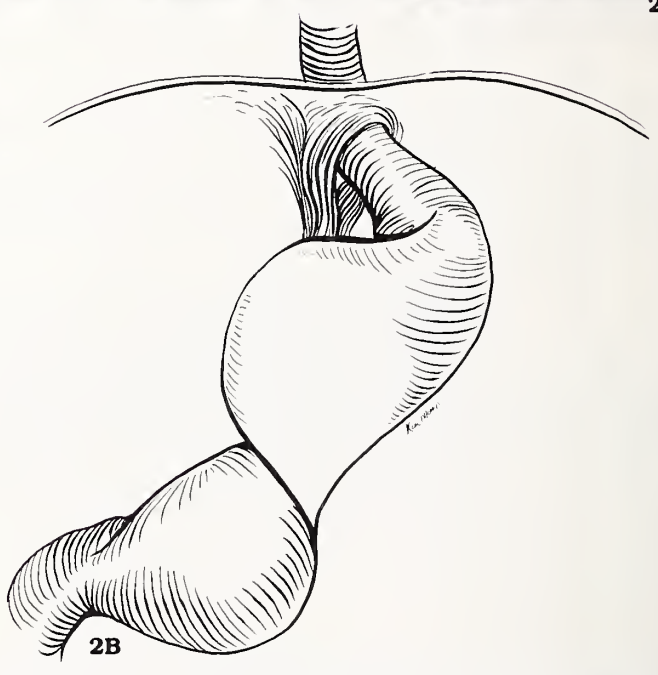


Figure 1—X-ray of chest and abdomen showing marked gastric dilation, a large mass in the left upper quadrant, and an elevated left hemidiaphragm.



2A



2B

Figures 2A and 2B—X-ray shows horizontal axis rotation and is schematically diagrammed in artist's sketch.

pancreas. These adhesions together with the duodenum served as fixed points on which the stomach rotated. Partial gastrectomy, splenectomy, lysis of adhesions from the pancreas, and gastropexy were performed. The spleen weighed 1,550 gm and measured 30 x 14 x 7 cm. Except for a complicating pneumonia, the patient made a steady postoperative recovery and was discharged from the hospital eight weeks later.

CASE REPORT 2

A 78-year-old white female came to the emergency room because of constant, nonradiating epigastric and left lower chest pain of two hours' duration. A similar episode occurred one week prior to admission and spontaneously resolved. The patient was lethargic, frail, and in moderate distress. Blood pressure was 130/70, pulse 84, and temperature 97.4°F. Breath sounds were decreased in both lower lung fields. The abdomen was tender to moderate palpation at the epigastric area.

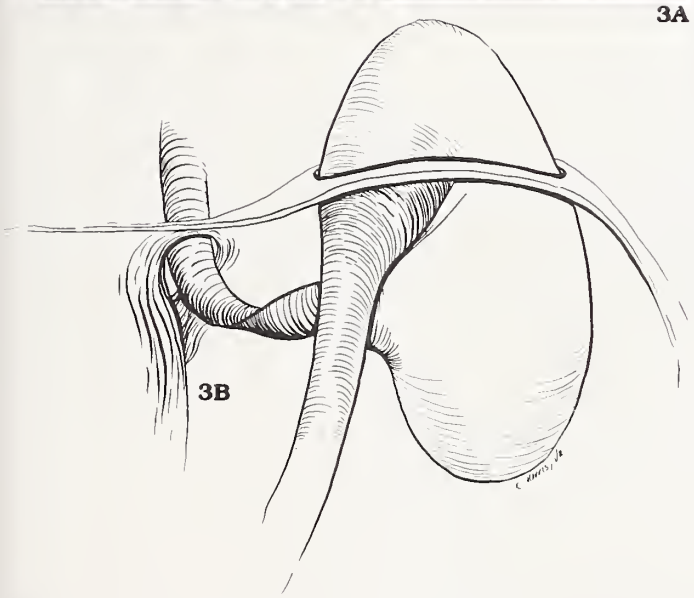
Chest x-ray revealed bilateral lower lobe infiltrates. Flat and upright abdominal x-rays were unremarkable. Hemoglobin was 11 gm/dl. About 12 hours after admission, the patient vomited approximately 500 cc of coffee ground material. A nasogastric tube was inserted and similar material continued to drain through the tube for the next few hours.

Esophagogastroduodenoscopy revealed severe esophagitis, a large hiatal hernia, and possible blockage of the pylorus. Upper gastrointestinal series (Figures 3A and 3B) showed a massive herniation of the body and portion of the gastric antrum through the diaphragm with volvulus, a small hiatal hernia, and a 1.5 cm antral ulcer. The nasogastric tube was not reinserted after the x-ray study.

During the night following the x-ray study, the patient vomited a considerable amount of coffee ground material and developed a marked pulmonary aspiration. After emergency bronchoscopy, exploratory laparotomy revealed an organoaxial gastric volvulus (vertical axis volvulus) and hiatal hernia. A subtotal gastrectomy, repair of the hiatal hernia, and gastroenterostomy were performed. The patient's con-



3A



3B

Figures 3A and 3B—X-ray shows vertical axis rotation and herniation of stomach thru diaphragm. This is schematically diagrammed in artist's sketch.

dition slowly deteriorated with continuing pulmonary complications as a result of the aspiration and she died six weeks postoperatively.

DISCUSSION

Dalgaard has shown in cadaver experiments that the normal stomach cannot be rotated 180° unless the gastrosplenic or gastrocolic ligaments are divided or are very lax.[6] Congenital or acquired adhesions can form an axis around which rotation may occur. Any situation that provides room for upward mobility of the stomach can predispose to gastric volvulus. All of the cases presented by Carter et al. had either a paraesophageal hiatus hernia or rupture of the diaphragm

TABLE 1

Pathogenesis and Etiology of Gastric Volvulus

I. Idiopathic

II. Primary

A. Congenital defects
   1. Faulty peritoneal attachments of the stomach
   2. Hour-glass shaped stomach
   3. Defect of left lobe of liver
   4. Congenital diaphragmatic defects

III. Secondary

A. Diaphragmatic defects
   1. Traumatic eventration
   2. Traumatic diaphragmatic hernia
   3. Elevation of left hemidiaphragm (phrenic nerve paralysis and left lung resection)

B. Extrinsic lesions, e.g. adhesions

C. Intrinsic lesions, e.g. ulcers, neoplasms

D. Acute gastric dilatation

E. Hiatal hernia

due to previous trauma with one exception. That patient had a Bochadalek's type of diaphragmatic hernia.[5] Our second patient had an extensive paraesophageal hiatus hernia. Although our patient in case report 1 had a history of previous x-ray demonstration of hiatus hernia, none could be demonstrated at the time of operation. However, there was a fixation of the proximal portion of the fundus to the spleen caused by a previous perforation of a gastric ulcer into the substance of the spleen with resultant dense adhesions.

Congenital abnormalities of the peritoneal attachments of the stomach, "hour-glass" type stomach (with the resultant lengthening of the peritoneal attachments), and defects of the left lobe of the liver are other predisposing factors in the etiology of the condition (Table 1).

The stomach volvulus can take two directions: around the vertical axis of the stomach (from the esophagogastric junction thru the pylorus) or around the horizontal axis (from a point on the fundus thru the pylorus). These are referred to, respectively, as organoaxial and mesenteroaxial volvulus. Case report 1 is an example of mesenteroaxial (Figures 2A and 2B) and case report 2 is an example of organoaxial volvulus (Figures 3A and 3B). This classification is based on Singleton's modification of Von Habener's original classification.[7] Since this is a somewhat arbitrary classification, the possibility of a combination of the two types can occur (Table 2).

The organoaxial rotation is the most common type of gastric volvulus and occurs in about 65 percent of acute cases. Since there are two sites of obstruction (at the cardia and the pylorus) it is the most apt to strangulate. The mesenteroaxial rotation occurs in about 30 percent of acute cases. Obstruction usually occurs at the mobile pylorantrum. Spontaneous detorsion with recurrent acute episodes is more common because the rotation is partial. Complete occlusion or strangulation is less apt to occur.

TABLE 2

Classification

I. Axis of Rotation

A. Organoaxial
B. Mesenteroaxial
C. Combined

II. Extent of Torsion

A. Total volvulus (obstruction)
B. Partial volvulus (intermittent, vague symptoms)

III. Clinical Presentation

A. Acute
B. Chronic

In 1904, Borchardt emphasized a triad of symptoms that is of great diagnostic value in acute gastric volvulus: 1) severe epigastric pain and distention; 2) vomiting followed by violent retching with an inability to vomit; and 3) difficulty or failure to pass a nasogastric tube.[8]

Routine flat and upright x-rays of the abdomen and chest usually show marked dilatation of the stomach or a gas-filled viscus in the chest.

Given this set of clinical findings, a decision on immediate surgery must be reached. The determining factor is the ability to pass a nasogastric tube into the stomach and decompress it. Both our patients were decompressed with ease. Inability to perform such a maneuver implies that both the pylorus and the esophago-gastric junctions have been occluded. In such an extreme twisting, there is a grave risk of occlusion of the normally rich blood supply to the stomach with resultant gastric necrosis. Strangulation leading to gangrene occurs in about 5 percent of cases, but it carries a 30 percent mortality rate.

Successful decompression, however (as illustrated in the second case), does not relieve the surgeon of the necessity for operation. It does gain time for better preparation of the patient. If the patient is decompressed and surgery is not performed, two problems may occur: 1) bleeding from the damaged and/or ulcerated gastric mucosa (at times it is profuse and coupled with the risk of aspiration), and 2) recurrence of the volvulus and distention with all of its initial problems.

In our second case, the initial bleeding stopped shortly after insertion of the nasogastric tube and the patient was treated with blood and fluid replacement and supportive measures. The diagnosis was established late on the day of admission by immediate upper gastrointestinal series. The nasogastric tube was not replaced after the x-rays; bleeding recurred and aspiration resulted. Immediate bronchoscopy, cortisone administration, and mechanical ventilatory support were instituted. Emergency hemigastrectomy and repair of the associated hiatus hernia were performed for the control of bleeding. Despite these measures, the pulmonary complication proved insurmountable and the patient expired in pulmonary failure approximately six weeks after surgery.

In the treatment of acute gastric volvulus, the first maneuver should be an attempt to pass a nasogastric tube. If a tube can be passed successfully, it is possible to achieve temporary reduction of the volvulus after emptying the stomach. Immediate operation is indicated if a nasogastric tube cannot be passed. After reduction, attention must be directed at correcting any underlying condition that may have been a precipitating factor. Gastric necrosis will require a local excision, subtotal resection, or total gastrectomy. Shortening of the lesser omentum may be a useful procedure when indicated. Gastropexy with colonic displacement, proposed by Tanner,[9] is useful in chronic idiopathic cases. However, the selection of any procedure should be based on the predisposing cause of the volvulus.

SUMMARY

The authors describe their clinical experience with two cases of gastric volvulus which illustrates the diagnosis, management, and complications of this disease. Some of the literature on gastric volvulus has been reviewed and presented.

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CASE REPORT: CAROTID ULCER UNDETECTED BY ANGIOGRAPHY

P.V. PATHANJALI SHARMA, M.D., NORMAN D. CORWIN, M.D., ROY A. VOGEL, M.D., WESTWOOD*

Our patient presented with recurrent amaurosis fugax. Neither the digital subtraction angiogram nor the contrast study revealed a large shallow ulcer of the internal carotid artery which was confirmed at surgery. Convincing clinical syndrome of embolic phenomena from the carotid bifurcation mandates exploration despite the inability of conventional studies to clearly demonstrate the source.

Ulcerating plaques of the carotid artery continue to be a major source of emboli resulting in strokes. The diagnosis of ulcerating lesions is a constant challenge to the practicing physician and the vascular surgeon. Most noninvasive techniques of evaluating extracranial cerebrovascular disease cannot detect ulcerated plaques. Digital subtraction angiography of the carotid arteries has been less helpful in the diagnosis of ulcerative lesions than was anticipated by initial reports. Conventional selective contrast angiography of the carotid arteries continues to be the "gold standard" for the ultimate diagnosis of ulcerating lesions permitting definitive treatment.

We present a case in which selective right carotid angiogram in three projections failed to reveal a significant carotid ulceration causing multiple embolic episodes.

CASE REPORT

A 56-year-old hypertensive, nonsmoking, white female was admitted to Pascack Valley Hospital, Westwood, with a history of repeated episodes of amaurosis fugax in the right eye for five days prior to admission. She had two to three episodes of transient loss of vision in the right eye each day. There was no carotid bruit. The blood pressure and serum cholesterol were normal. The fundoscopic examination revealed "Hollenhorst plaques" in the retinal arteries (Figure 1). She was heparinized soon after admission. A digital subtraction angiogram of the aortic arch and the entire neck (Figure 2A) revealed no abnormalities. A selective right carotid angiogram (Figures 2B, 2C, and 2D) in three projections including the intracranial vessels revealed no evidence of stenotic or ulcerating lesions in the entire length of common and internal carotid arteries. A smooth 3 mm long plaque was noted in the distal common carotid artery. For the few hours that heparin was omitted before and after angiography, the patient experienced an additional episode of right amaurosis fugax. Cholesterol emboli in the retinal arteries were again confirmed by fundoscopy.

Exploration of the right carotid bifurcation was recommended and performed based upon convincing clinical syndrome despite a normal angiogram. The exploration revealed a 2 cm long plaque in the carotid artery extending 1.5 cm into the internal carotid artery. There was a large shallow ulcer at the distal end of the plaque which measured 5 mm in diameter (Figure 3). An uneventful postoperative course followed the carotid endarterectomy and no further embolic episodes were noted.

*Drs. Sharma, Corwin, and Vogel are affiliated with Pascack Valley Hospital, Westwood. Correspondence may be addressed to Dr. Sharma, 400 Old Hook Road, Suite 2-4, Westwood, NJ 07675.

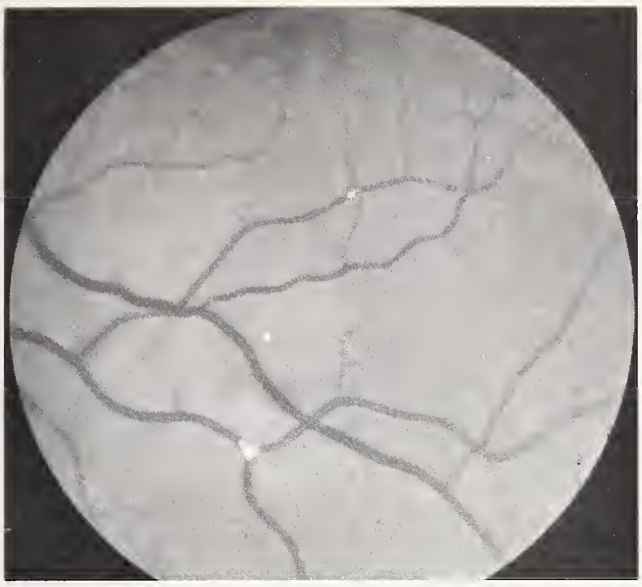
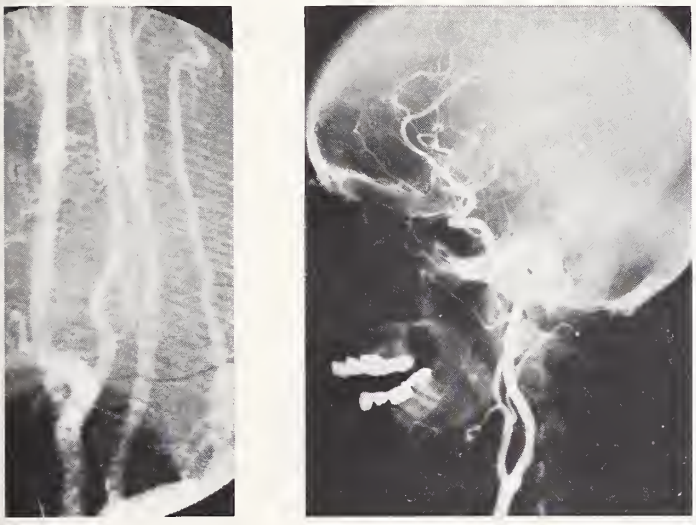
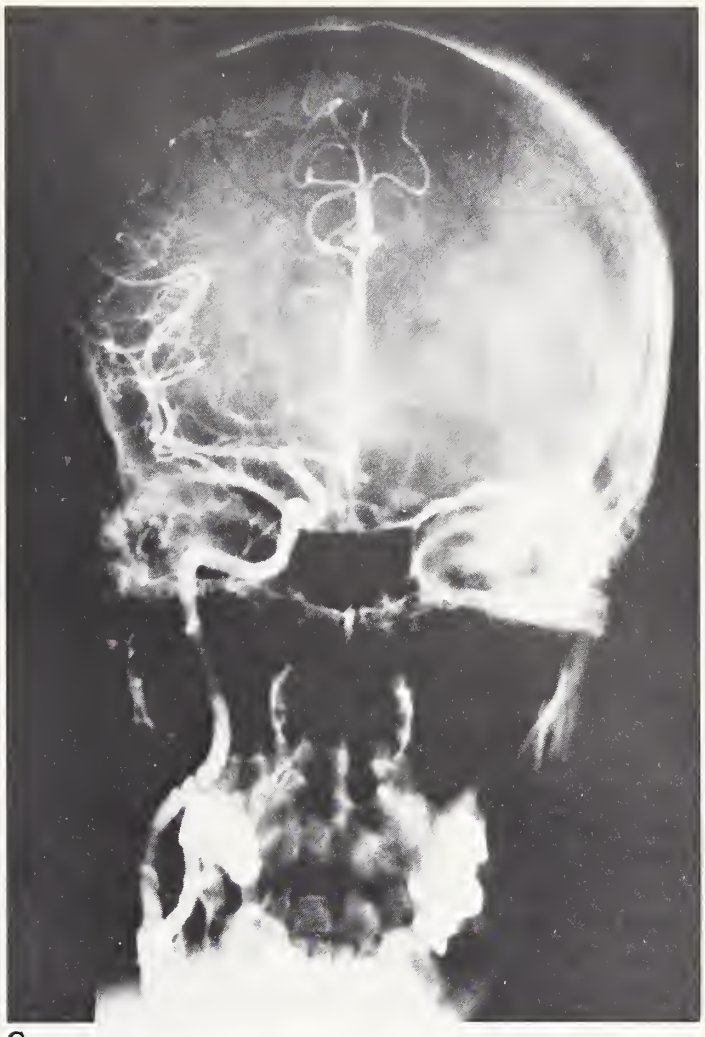


Figure 1—"Hollenhorst plaques" in the retinal arteries.



A B

Figure 2—Digital subtraction angiogram (2A), selective right carotid angiogram in lateral (2B) and anterioposterior (2C) projections and digital study in the oblique view (2D) fail to reveal the presence of ulceration in the right internal carotid artery confirmed at surgery.



C D



DISCUSSION

Cerebrovascular disease is the third leading cause of mortality in this country, accounting for 175,629 deaths in 1978 alone.[1] Approximately 407,000 people suffer from strokes annually, 73.5 percent of these are new strokes whereas 26.5 percent of the strokes occur in patients with a previous history of stroke or transient ischemic attack.[2] Over half the strokes are thrombotic or embolic in nature.[2] The carotid bifurcation is the most common extracranial source of strokes affecting at least one-third of these patients.[3] Noninvasive techniques such as Doppler, ultrasonic imaging, oculoplethysmography, and carotid phonoangiography that have evolved to evaluate extracranial cerebrovascular disease have been very useful in the detection of stenotic lesions and to establish their hemodynamic significance. However, ulcerating nonstenotic lesions are not detected by such studies. The recent advent of digital subtraction angiography holds limited promise in the detection of such lesions.[4] Usually, conventional

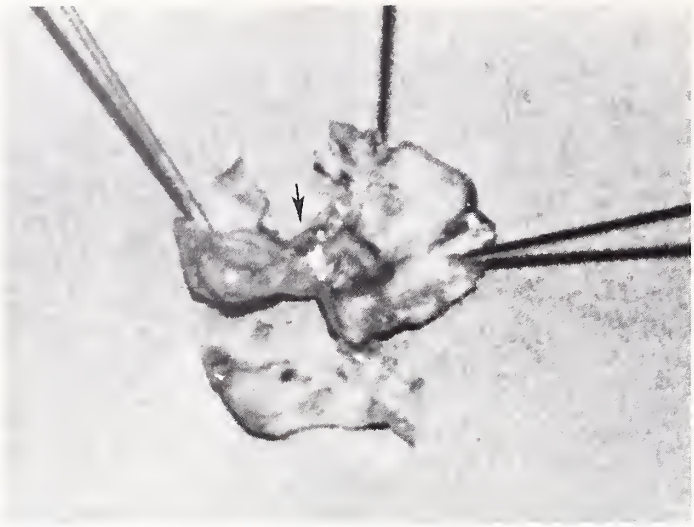


Figure 3—Surgical specimen showing a large shallow ulcer in the internal carotid artery.

contrast angiography is the ultimate study that aids in the eventual diagnosis and definitive therapy. The case reported here demonstrates the limitations of even the conventional angiogram in the diagnosis of clinically significant but shallow ulcers. Edwards et al. have estimated the diagnostic accuracy of carotid bifurcation angiography to be 60 percent when correlated with surgical findings.[5] In their experience, 20 percent of carotid ulcers occurred as smooth benign-appearing plaques not detected by angiography. Although Blaisdell et al. have reported an 86 percent accuracy,[6] Eisenberg and his coworkers have noted only a 47 percent angiographic accuracy in the diagnosis of carotid bifurcation ulcers.[7] Hertzer et al. have examined tissue specimens by electron microscopy from ten patients after carotid endarterectomy for transient ischemic attacks and concluded that ulcers ranging from 100 to 600 microns in diameter were large enough to produce symptomatic emboli.[8] Hence, the diagnostic accuracy of angiography in detecting ulcerated plaques can fall short of reported expectations[5] due to the shallowness of the ulcer in minimally stenotic arteries.

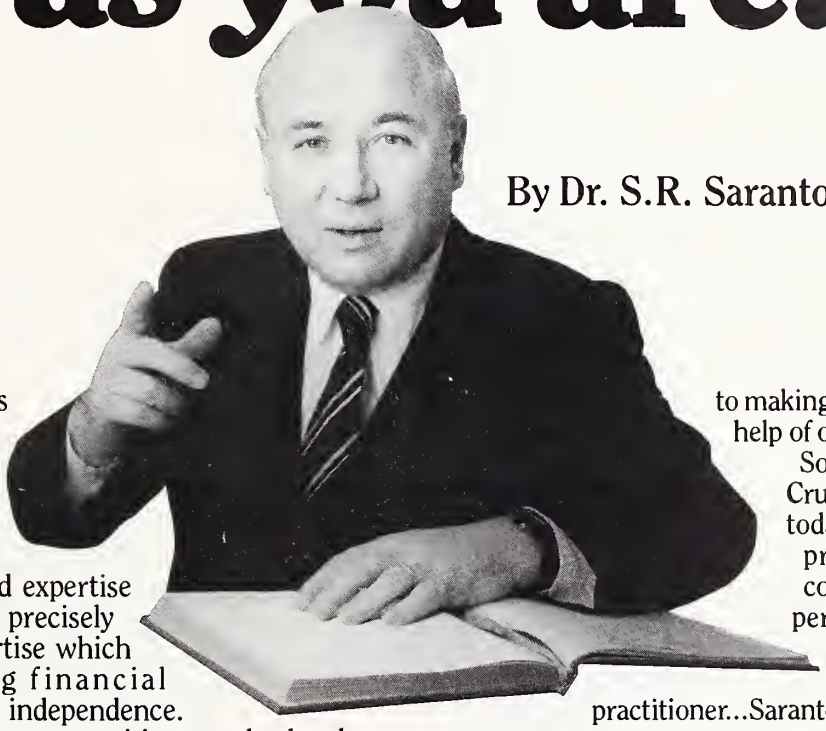
CONCLUSION

We recommend that surgical exploration of the carotid bifurcation be considered when a convincing clinical syndrome of amaurosis fugax with Hollenhorst plaques exists but carotid angiograms are equivocal.

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1st Vice-President	1 year	Harry M. Carnes, M.D., Camden
2nd Vice-President	1 year	Palma E. Formica, M.D., Middlesex
Trustees:		
1st District	3 years	Fred M. Palace, M.D., Morris
4th District	3 years	Louis L. Keeler, M.D., Camden
4th District	3 years	Edwin W. Messey, M.D., Burlington
5th District	3 years	Harry W. Fullerton, Jr., M.D., Salem
Judicial Councilor:		
3rd District	3 years	Louis G. Fares, M.D., Mercer
AMA Delegates:		
	2 years	William J. D'Elia, M.D., Monmouth
	2 years	Myles C. Morrison, Jr., M.D., Morris
	2 years	Frank Y. Watson, M.D., Essex
AMA Alternate Delegates:		
	2 years	L. Arne Skilbred, M.D., Essex
	2 years	S. Thomas Carter, Jr., M.D., Camden
	2 years	Armando F. Goracci, M.D., Gloucester
	2 years	William E. Ryan, M.D., Mercer
	2 years	Edward A. Schauer, M.D., Monmouth
Administrative Councils:		
Legislation:		
2nd District	3 years	Thomas J. Connolly, M.D., Hudson
3rd District	3 years	Gabriel F. Sciallis, M.D., Mercer
Medical Services:		
2nd District	3 years	Joseph W. Fleisher, M.D., Hudson
3rd District	3 years	B. Ralph Wayman, Jr., M.D., Mercer
Mental Health:		
4th District	3 years	Kenneth J. Rubin, M.D., Monmouth
5th District	3 years	N.J. George, M.D., Cumberland
Public Health:		
2nd District	3 years	Albert Ehrlich, M.D., Hudson
3rd District	3 years	Thomas E. Desmond, M.D., Middlesex
Public Relations:		
3rd District	3 years	No nominee
6th Member	3 years	Harry H. Brunt, Jr., M.D., Monmouth
Standing Committees:		
Annual Meeting	3 years	Frank R. Romano, Sr., M.D., Union
Auxiliary Advisory	3 years	Frank R. Romano, Sr., M.D., Union
Finance and Budget	3 years	George L. Triebenbacher, M.D., Ocean
Medical Defense and Insurance	3 years	John E. Bocker, M.D., Monmouth
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SPEAKER

Congressman Hal Daub (R-NE)

Member
House Ways and Means Committee
Subcommittee on Health
Subcommittee on Social Security

TOPIC

HEALTH PERSPECTIVE/99th CONGRESS

5:45 p.m.

Wine & Cheese Reception

Baroque Ballroom

DOCTORS' NOTEBOOK

Trustees' Minutes; Current Legislation; UMDNJ Notes; MSNJ Auxiliary; AMNJ Report; Physicians Seeking Location in New Jersey

Trustees' Minutes February 17, 1985

A regular meeting of the Board of Trustees was held on Sunday, February 17, 1985, at the Executive Offices in Lawrenceville. Detailed minutes are on file with the secretary of your county society. A summary of significant actions follows:

Report of the President . . .
(1) Ad Hoc Committee on PRO Criteria . . . Noted that Arthur Krosnick, M.D., chairman of this committee, requested comments on the proposed criteria for preadmission certification developed by the PRO of New Jersey.

(2) AMA Positions . . .
(a) Senior Deputy Executive Vice-President . . . Noted that James S. Todd, M.D., was named Senior Deputy Executive Vice-President.
(b) AMA Trustee . . . Approved unanimously the following recommendation:

That the Board of Trustees endorse the candidacy of Palma E. Formica, M.D., for election to the AMA Board of Trustees, and authorize the expenditure of funds for campaign activities on her behalf.

(c) Council on Medical Service . . . Noted that Karl T. Franzoni, M.D., has been nominated for election to the Council on Medical Service.
(d) Council on Scientific Affairs . . . Noted that Arthur Bernstein, M.D., has been nominated to the Council on Scientific Affairs.

Report of Executive Director . . .
(1) MSNJ 1985 Paid Membership . . . Noted that as of February 8, 1985, dues were received for 5,377 members.
(2) In Re Conroy . . . Approved the following three recommendations:

That, in order to resolve the concerns of the New Jersey Chapter of the American College of Physicians, the Supportive Care Guidelines, the Supreme Court decision *In re Conroy*, and the communications received from Dr. Michael A. Nevins, regarding the Supportive Care Guidelines, be referred to the Committee on Biomedical Ethics for review.
That a communication be sent to Governor Kean, requesting that a blue ribbon panel be appointed to promulgate a set of guidelines to implement the *Conroy* decision.
That the Board authorize Mr. Maressa, on behalf of MSNJ, to join with the attorney for Dr. Greco in requesting the SBME to reconsider the disciplinary action taken in the Greco case, in light of the Supreme Court decision in the *Conroy* case.

(3) State of New Jersey Reinsurance Association Deficit . . . Noted that a decision regarding the assessment to recoup the defict of the Association is expected shortly.

(4) Legal Matters . . .
(a) Subordinated Loan Certificates . . . Noted the ruling by the U.S. Tax Court stating: 1) individuals filing Schedule C form must treat the payment as a capital expenditure; 2) corporations must report it as a capital item; and 3) payments by professional corporations are not dividends or compensation to shareholders/employees or compensation to nonshareholders/employees.
(b) DRG—Medical Staff Privileges . . . Noted clarification of an article appearing in *Medical Economics* concerning a physician, Dr. Edelman, who lost hospital privileges because of poor DRG performance: in actuality, it might be stated that a disruptive, uncooperative member of the staff practicing in a pattern below accepted standards may be removed from the staff; the fact that government and third-party reimbursement was lost to the hospital is incidental and purely cumulative evidence.
(c) Federal Trade Commission Inquiry of MSNJ . . . Noted that the FTC advised no further action is warranted and the investigation has been closed.
(5) NJ State Society of Anesthesiologists . . . Acknowledged its gratitude for a $1,000 unrestricted grant from the Society of Anesthesiologists.

NJ Hospital Association . . .
(1) Annual Achievement Award . . . Noted that James S. Todd, M.D., is the recipient of the 1985 Achievement Award.
(2) Status Report . . .
(a) Hospital/PRO Regional Meetings . . . Noted that there was a commitment by PRO to meet with hospitals on a regional basis to discuss the review process and related issues.
(b) PRO Program . . . Noted that representatives from the Medical Administrators Committee of the Council on Professional Practice will attend MSNJ's Ad Hoc Committee on PRO Criteria to discuss ways to determine the impact of PRO programs on hospitals and patients.
(c) Licensure and Certification . . . Noted that the NJ Hospital Association supports the screening panel for licensure for the Occupational Therapist Licensing Act and the Dietitian Licensing Act.
(d) Indigent Care . . . Noted that the Association is looking toward legislation which will establish an uncompensated care fund for hospitals, funded by a tax on hospital revenues, general state funds, and possible federal matching funds, if they are available. Noted that the DRG all-payer system has postponed but not resolved the indigent care issue.
(e) Medicare Freeze . . . Noted that the Association has authorized its staff to institute a grassroots campaign to garner support for the hospital industry's position.

Council on Legislation . . . Approved the positions recommended by the Council for current legislation (complete listing on page 324) with the exception of two bills (S-2134, Prader-Willi Syndrome and A-2498, Vitiligo) where the positions of No Action were changed to Disapproved.

Special Committee on Long-Range Planning and Development . . .
(1) Review of MSNJ's Councils and Committees . . . Approved the following recommendations and criteria:

That the name of the Committee on Medical Defense and Insurance be changed to the Committee on Membership Services.

That the Committee on Membership Services be responsible for monitoring and reporting on all endorsed programs of the Society (which currently include the physician insurance programs, Legal Services Plan, and I. C. System, Inc.), for screening all new offerings of products or services proposed as Society-endorsed, membership benefit programs, and for making recommendations on these items to the Board of Trustees. The following criteria are to be applied:

Criteria for Evaluating Programs for MSNJ Sponsorship
1) The program must offer goods or services needed by physicians in the practice of their profession and the management of their practices.
2) The goods and services must be of the highest quality and must be priced through the Society at rates lower than those generally available through market sources.
3) No program shall be offered which competes with the professional medical services of any member.
4) One or more suppliers of the goods or services are to be studied for feasibility and desirability.
5) The Committee on Membership Services should conduct ongoing review of all programs. All endorsed programs must be evaluated at least annually.

(2) Current MSNJ Positions . . .
(a) Monitoring by Committee on Long-Range Planning and Development . . . Agreed that if a position of MSNJ's can be perceived as projecting a negative image, the Committee should recommend the position be revised in a positive way.
(b) DRG Position . . . Noted to refer the question of a current position on DRGs to the Ad Hoc Committee on Presentation of MSNJ DRG Position for consideration and report back in March.

(3) Composition of the Board of Trustees . . . Defeated a recommendation that would have increased the size of the Board of Trustees by having one Trustee for each county plus an additional Trustee if county membership exceeds 750 members.

Committee on Drug and Alcohol Abuse . . .
(1) Health Insurance Coverage for Drug Abuse Treatment . . . Extended an invitation to the Committee on Drug and Alcohol Abuse, Mr. Russo of the Department of Health, and Mr. Kurtz of the NJ Business and Industry Association to attend the next meeting of the Council on Legislation to discuss bills on mandatory health coverage for drug abuse treatment.

(2) Therapeutic Communities . . . Approved the following recommendation:

That the Board of Trustees support the position of the Committee on Drug and Alcohol Abuse that therapeutic communities can be extremely valuable treatment modalities for recovering drug abusers provided that adequately trained staff supervise these programs and that appropriate medical and psychiatric backup services are available.

Nominating Committee . . .
(1) Conflict of Interest . . . Supported the position that any member of the Nominating Committee who is a candidate prior to the meeting must resign and that any Nominating Committee member who becomes a candidate during the course of the meeting must resign at that time.

Old Business . . .
(1) Guidelines for a Podiatry Department or Section . . . Accepted the *Guidelines for a Podiatry Department or Section* developed by representatives of the Hospital Medical Staff Section and the New Jersey Podiatric Medical Society; this is a system for credentialing of podiatrists to be used by hospital medical staffs.
(2) State Board of Medical Examiners . . . Noted that no action was taken on correspondence from Morris County Medical Society.
(3) 1984 Annual Meeting Resolutions . . .
(a) Premium Discount-Professional Liability Insurance . . . Approved the following recommendation:

That the Medical Society of New Jersey request insurance carriers to consider presenting seminars on basic medical-legal matters and to provide discounts if warranted.

(b) SBME Pronouncement of Death Regulation . . . Noted that SBME has not yet filed a status report on this resolution.

New Business . . .
SBME . . .
(1) Releasing Malpractice Reports to the Public . . . Requested that a communication be sent to the SBME calling attention to the exception section which states that matters under investigation are not covered under the Right To Know Law and the Freedom of Information Act.
(b) Newsletter . . . Sent a letter to the SBME noting that a recent listing in their newsletter of licensees who have had action taken upon them between September 1983 and August 1984 does serious harm to the physicians named and serves no real purpose.

Current Legislation

The Board of Trustees of the Medical Society of New Jersey approved the recommended positions on the following bills of medical interest:

S-2011-Ewing—Community Mental Health Centers. Appropriates $1.38 million for the UMDNJ community health centers at Newark and New Brunswick. **No Action.**

S-2098-Rand—Cancer Research. Extends the scope of research projects that may be conducted by the State Commission on Cancer. **No Action.**

S-2116-Bassano—Abortion. Requires physicians to inform women undergoing abortions of the availability of fetal anesthesia whenever the fetus to be aborted is viable (i.e. able to live outside the womb with or without artificial means of support.) The act is not applicable during an emergency, or if the anesthesia decreases the possibility of survival of the fetus, or if the anesthesia to the mother also will abolish organic pain to the aborted fetus. **Disapproved, with Active Opposition if the bill moves.** This bill encourages abortion in the third trimester, which is contrary to the accepted standards of practice and presents unacceptable dangers to patients.

S-2134-Garibaldi—Prader-Willi Syndrome. Requires the state to conduct an exhaustive study of Prader-Willi syndrome including an assessment of available services. A report with findings, conclusions, and recommendations is to be submitted to the Governor and legislature within two years. **Disapproved,** because there has been no evidence submitted to determine the frequency of this disease, its coverage under current insurances, and what the rating impact of mandated benefits would be.

S-2142-Hurley—Disposal of Hypodermic Syringes. Permits the needle or syringe to be discarded as a single unit

without recapping. The container shall be destroyed by grinding, crushing, or incineration. Present law requires that a needle be removed from the hub and the syringe mangled and melted. **Approved.**

S-2150-Jackman—Fetal Tissue (A-2584). Requires that the remains of any fetus of less than 20 weeks be disposed of by interment. **Action Deferred,** pending further information from the New Jersey Obstetrical and Gynecological Society, Pathology Society of New Jersey, and MSNJ's Committee on Maternal and Child Care.

S-2159-Hagedorn—Involuntary Commitments. Substantially alters the involuntary commitment law. Significantly, certification may be effected by psychologists, nurses, or social workers who have conducted an examination of the person within the three days prior to certification. **Active Opposition,** because this legislation would not improve the present mechanism and by creating another level of service would tend to increase mental health delivery costs in New Jersey.

S-2172-Connors—Fetal Tissue (A-2477). Authorizes the incineration of fetal tissue of less than 20 weeks' gestation by individuals licensed through the State Department of Health. **Action Deferred,** pending further information from the New Jersey Obstetrical and Gynecological Society, Pathology Society of New Jersey, and MSNJ's Committee on Maternal and Child Care.

S-2282-Ewing—Professional Licensing. Creates a commission to advise the Governor and the legislature regarding any proposals to regulate or license new professions. **Approved.**

S-2330-Foran—Emergency Services. Would allow a paramedic or R.N., with special training, to ride with an EMT unit and perform advanced life-support services. **Action Deferred,** pending further information from the New Jersey Nurses Association and MSNJ's Committee on Emergency Medical Care.

S-2347-Lipman—Adolescent Pregnancy. Establishes a Task Force on Adolescent Pregnancy to compile and study information on current programs in order to recommend statewide programs to combat adolescent pregnancy. **Conditional Approval,** pending the inclusion of physician representation from the New Jersey Obstetrical and Gynecological Society, the New Jersey Chapter, American Academy of Pediatrics, and the New Jersey Academy of Family Physicians.

S-2361-Costa—Aides in Nursing Homes. Authorizes the Department of Health to certify aides in long-term care facilities pursuant to completion of an approved training course and passing of an examination. **Disapproved, with Active Opposition if the bill moves.** There is no demonstrated need for the certification of these aides and such a system will produce increased costs.

S-2365-Hagedorn—Medicaid Long-Term Care. Increases Medicaid reimbursement to intermediate and long-term care facilities based upon their Medicaid census. **Approved.**

S-2379-Costa—Consults. Provides that consulting physicians are not to be reimbursed unless the patient has agreed, in writing, prior to the consultation. Substantial incapacity of the patient and mandatory consultations as a result of law, hospital rule, or insurance contract are excepted. **Active Opposition,** because this bill presents an unworkable situation in acute care hospitals. Written consent of the patients cannot always be secured. This bill would increase delays and discourage the prompt use of consultations and the efficient management of health care services.

S-2387-Feldman—Terminal Illness. Provides a person may execute a document withholding or withdrawing life-sustaining procedures if the person has been diagnosed and certified by two physicians as suffering from a terminal illness. The attending physician would be expected to honor the request of the patient. There also is a proviso for an oral declaration. **Action Deferred,** pending further information from MSNJ's Committee on Biomedical Ethics.

S-2485-Bassano—Smoking/Public Places. Grants owners of buildings and businesses open to the public the ability to regulate smoking within their premises. **Active Support.**

S-2487-Dalton—Smoking/Workplace. Requires employers to establish written policies to control smoking in the work environment. **Active Support.**

S-2488-Contillo—Smoking/Government. Requires government supervisors to establish written policies to control smoking in government buildings. **Active Support.**

S-2489-Graves—Smoking/Public Conveyances. Prohibits smoking in public conveyances. **Active Support.**

A-27-Gill—Blood Donations. Provides that a person who makes a blood donation when he knows he is infected with a communicable disease shall be guilty of a fourth degree crime. **No Action.**

A-2129-Walker—Infant Mortality. Creates an infant mortality prevention program in the Department of Health to provide obstetrical and prenatal services to women with high-risk pregnancies. Also provides postpartum followup services. Seven hospitals are designated by statute with three to be added by the Commissioners. Four million dollars is appropriated. **Approved.**

A-2140-Rooney—Juvenile Offenders. Provides that a judge may order a juvenile offender to be examined by a physician, optometrist, or audiologist. **Active Opposition,** because there is no accepted scientific correlation between visual acuity problems and juvenile delinquency.

A-2406-Shusted—Hemodialysis Technicians. Hemodialysis technicians would work under the supervision of physicians. This legislation would establish 1) guidelines for training and education; 2) guidelines for recognized testing and certification procedures; and 3) guidelines to define the role and responsibilities of the hemodialysis technician.

Daily Schedule
219th Annual Meeting

May 2-5, 1985
Americana Host Farm Resort
Lancaster, Pennsylvania

Thursday, May 2, 1985

9:00 A.M.—Registration Opens
9:00 A.M.—Message Center Opens
2:00 P.M.—House of Delegates
4:00 P.M.—Reference Committees (Three Reference Committee Meetings)

Friday, May 3, 1985

7:30 A.M.—Registration Opens
9:00 A.M.—House of Delegates (election)
9:00 A.M.—Message Center and Exhibits Open
12:00 NOON—Golden Merit Award Ceremony Followed by Reception
2:30 P.M.—Reference Committees (Three Reference Committee Meetings)
5:00 P.M.—JEMPAC Political Forum
5:45 P.M.—JEMPAC Wine and Cheese Reception

Saturday, May 4, 1985

8:00 A.M.—Registration Opens
8:30 A.M.—House of Delegates
9:00 A.M.—Message Center and Exhibits Open
1:30 P.M.—House of Delegates
6:30 P.M.—Inaugural Reception followed by Inaugural Dinner

Sunday, May 5, 1985

8:00 A.M.—Registration Opens
8:30 A.M.—Program of Major Interest to Physicians
9:00 A.M.—Message Center and Exhibits Open
12 NOON—Luncheons and Board of Trustees' Meeting

Action Deferred, pending further information from other approved renal dialysis units in order to ascertain their staffing protocol procedures.

A-2426-Cooper—Health Insurance. Eliminates the exclusion from health insurance of second surgical opinion programs and pregnancy-related sterilizations. **No Action.**

A-2469-Miller—Child Abuse Prevention. Creates a 24-member commission to study the problem of child abuse and to recommend methods of prevention. **Approved.**

A-2470-Felice—Child Abuse. Requires boards of education to establish public education programs to instruct parents, teachers, and others in the detection of, and response to, signs of child abuse. **Approved.**

A-2471-Haytaian—Child Abuse Prevention Registry. Creates a registry within the Division of Youth and Family Services (DYFS) of persons convicted of, or charged with, child abuse. The DYFS shall develop guidelines for obtaining and releasing the information collected. **Approved.**

A-2472-Haytaian—Child Abuse Parental Assistance. Directs the Department of Human Services to establish treatment and education programs for parents who have abused their children. **Approved.**

A-2473-Haytaian—Child Care Employees. Provides that any person who has been convicted of child abuse or violent crimes against adults shall not be employed in a position which places them in routine contact with children. **Conditional Approval,** pending amendment to Section 3 of the bill re termination of current employees, allowing the employers of the people accused to ascertain whether or not they present a danger to the children.

A-2474-Frelinghuysen—Child Care Employees. Requires all new and present employees of child care centers to undergo state and federal criminal background checks. **Approved.**

A-2477-Hendrickson—Fetal Tissue (S-2172). Authorizes the incineration of fetal tissue of less than 20 weeks' gestation by individuals licensed through the State Department of Health. **Action Deferred,** pending further information from the New Jersey Obstetrical and Gynecological Society, Pathology Society of New Jersey, and MSNJ's Committee on Maternal and Child Care.

A-2485, A-2486, A-2487, A-2489, and A-2490-Kosco—Health Insurance. Requires the various classes of health insurers to cover nuclear magnetic resonance (NMR) scans. **No Action.**

A-2498-Perun—Vitiligo. Creates an education program within the Department of Health regarding the detection and treatment of vitiligo. **Disapproved,** because there has been no evidence submitted to determine the frequency of this disease, its coverage under current insurances, and what the rating impact of mandated benefits would be.

A-2554-Doria—Professional Boards. Creates a Review Commission within the Division of Professional Boards to study and comment on various licensing proposals. **Approved.**

A-2557-Zimmer—Emergency Services. Creates an intermediate EMT unit and type of personnel (companion to **A-2005** of 1984). **Action Deferred,** pending further information from MSNJ's Committee on Emergency Medical Care.

A-2584-Rocco—Fetal Tissue (S-2150). Requires that the remains of any fetus of less than 20 weeks be disposed of by interment. **Action Deferred,** pending further information from the New Jersey Obstetrical and Gynecological Society, Pathology Society of New Jersey, and MSNJ's Committee on Maternal and Child Care.

A-2757-Kern—Nurse Midwives. Empowers the State Board of Medical Examiners to license and regulate nurse-midwives. Creates a five-member Nurse-Midwives Examining Committee which would have the power to license and regulate nurse-midwives. The Committee would have stipulated, delegated powers from the Board and would function independent of the Board. **Active Opposition,** because this situation is adequately covered under existing laws and a joint regulatory committee of the Nursing Board and the Medical Board. Further, the New Jersey Board of Medical Examiners may not, under New Jersey law, delegate functions to a committee which then acts independently.

A-2830-Otlowski—License Suspensions. Requires certain licensing boards to notify the Department of Health whenever they have suspended the license of a practitioner. The Department of Health shall notify the Board of Pharmacy and the Board of Pharmacy shall notify the pharmacists.
Approved.

A-2872-Felice—Methadone Registry. Establishes a central registry within the Department of Health of patients enrolled in methadone maintenance programs. **Action Deferred,** pending further information from MSNJ's Committee on Drug and Alcohol Abuse.

A-2889-Herman—Physician Assistants. Provides for a separate licensing board to register physician assistants who would function under the supervision of a licensed physician at a 2:1 ratio. **Active Opposition,** because licensure and/or registration of physicians' assistants neither will contribute to the quality of medical care nor decrease the cost of medical care. (House of Delegates/December 10, 1979)

UMDNJ Notes

Stanley S. Bergen, Jr., M.D.
President

We are hopeful that by the time you read this our core teaching hospital in Newark, UMDNJ-University Hospital, will be on the way to reviving its open heart surgery program with the approval of the State Commissioner of Health, Dr. J. Richard Goldstein.

With the Commissioner's approval, we will move to implement an arrangement to coordinate the University Hospital cardiac surgery program with Newark Beth Israel Medical Center. Dr. Victor Parsonnet, head of surgery at Newark Beth Israel and a widely respected heart surgeon, will be administrative director of the cardiac surgery unit at University Hospital. He is clinical professor of surgery at UMDNJ-New Jersey Medical School.

The progress of our certificate of need application from its filing in October 1984, to the January endorsement by the State Health Coordinating Council, was not achieved without some uneasiness after a statewide advisory committee recommended that only Hackensack Hospital be allowed to start a new program of open heart surgery.

Our application for this new program has not been fully understood in all quarters. In fact, we are not running the risk of increasing the potential for cardiac surgery, but rather centralizing that activity at University Hospital.

Under the plan, University Hospital will serve the overflow from Newark Beth Israel, which has an active, growing program staffed by faculty members of UMDNJ-New Jersey Medical School.

The colocation project, which would relocate United Hospitals Medical Center to the Newark campus of UMDNJ, will bring about a stepwise relocation of specialized services now provided in the children's cardiac program of United Hospitals' Childrens' Hospital.

Activation of open heart surgery at University Hospital also will promote the reorientation of currently dispersed faculty activities from St. Michael's Medical Center and the Veterans Administration Hospital, East Orange, to the home base of the medical school to assure continued approval of the residency training program.

The cardiac surgery program is a vital component of the University's progress toward creating a world-class academic health center on the Newark campus and its effort to broaden the economic base of University Hospital with referrals for specialized medical services from outside the immediate area.

And, of course, open heart surgery has been an established program for years at other primary teaching hospitals of UMDNJ: Middlesex General-

University Hospital, New Brunswick and Cooper Hospital/University Medical Center, Camden.

A promising new treatment to dissolve gallstones is part of medical research into cholesterol-related diseases being advanced by Gerald Salen, M.D., professor of medicine at UMDNJ-New Jersey Medical School.

With financial support that has totaled more than $60,000 from the Herman Goldman Foundation of New York, Dr. Salen and his co-researcher, Dr. Stephen Tint, associate professor of medicine at UMDNJ-New Jersey Medical School, are testing an acid found in the liver and bile of some animals that dissolves gallstones painlessly and with no apparent side effects.

The research could lead to the marketing of a drug composed of ursodeoxycholic acid, a substance originally identified in the bile of bears. Given to gallstone patients, the acid has been found to reduce the amount of cholesterol in the bile and to bring prompt relief from pain or discomfort in a high percentage of cases.

This study, as well as a test of human bile acid, chenodeoxycholic acid, as a means of slowing a rapidly progressive form of atherosclerosis, also are supported by the Veterans Administration and the National Institutes of Health.

The New Jersey State Commission on Cancer Research recently made 15 two-year research grants, the second round of awards in the commission's young history. UMDNJ faculty members at Piscataway, New Brunswick, and Newark received 10 of those grants and more than half of the $968,165 in research money.

The commission is mandated by law to support basic science research, not the clinical studies involving patients. Though relatively small in comparison to some of our large federally-funded projects, these state grants are important "seed funding," particularly for young scientists who need to show results in order to obtain more substantial research money.

The commission, using revenue from a cigarette tax, has stated that more money is needed to accomplish its goal of "putting New Jersey at the forefront of cancer research."

MSNJ Auxiliary

Grace Gellman
President

The MSNJ Auxiliary has sent to the AMA Auxiliary a resolution that would establish an Impaired Spouses of Physicians Program and asked the National Auxiliary to assist state auxiliaries in forming their own Impaired Spouses Programs.

In April, the Bergen County Medical Society Auxiliary will be honored to host Mrs. Wayne Brady, President, AMA Auxiliary, at their annual fundraiser. The luncheon-fashion show will be held on April 16, at the Tammybrook Country Club in Cresskill.

Also in April, a contingent from the Auxiliary is heading for Washington, D.C., to speak with their respective congressmen. Mrs. Frank Campo, legislative chairman, has made arrangements for Ms. Dexanne Clohan, deputy director, department of congressional relations, AMA, to brief the group on current medical issues at dinner on April 17, 1985. The following morning one of

The *Journal* of the Medical Society of New Jersey
announces the reprinting of the

WILLIAM CARLOS WILLIAMS COMMEMORATIVE ISSUE

September, 1983

Honoring the 100th anniversary of the birth of New Jersey's prize-winning poet and physician. Included in this handsomely illustrated, full-color issue will be original articles by persons close to William Carlos Williams, artwork from his social and intellectual circle, and samples of his finest writings.

Copies of this special issue are available by sending $5.00 for each (check or money order) to MSNJ, Two Princess Road, Lawrenceville, NJ 08648.

Please send a copy of the **William Carlos Williams Commemorative Issue** to:

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Enclose a $5.00 check or money order for each copy.

our state senators will give a speech. After the breakfast meeting, we will go up to the Hill for appointments with our congressmen. After the visits, before heading home, we hope to go to the National Gallery for lunch. Auxiliary members from neighboring states will be joining us.

AMNJ Report

Robert S. Rigolosi, M.D.
President

The Board of Trustees of The Academy of Medicine of New Jersey has named the 1985 recipients of the awards which will be presented at our Annual Dinner on Wednesday, May 29, 1985, to be held at the Chanticler in Short Hills.

Stanley S. Bergen, Jr., M.D., will receive the Edward J. Ill Award "presented annually to that physician of New Jersey who merits recognition by the Academy for distinguished service as a leader in the medical profession and in the community at large." Recent recipients have included Drs. Leon Smith, Arthur Bernstein, Victor Parsonnet, James Todd, and Arthur Krosnick. Dr. Bergen is best known as president of UMDNJ and for his contributions to medical education.

The Academy's Citizen's Award is "presented annually to that citizen or group of citizens of New Jersey who merit recognition by the Academy for distinguished service in the interest of the health and welfare of the community at large." The 1985 Citizen's Award has been granted to Mrs. Mary Mulholland. Mrs. Mulholland is Director of the Development Department of Dover General Hospital, however, she is best known as founder of the "Dope Open" Golf and Tennis Classic. Through Mrs. Mulholland's efforts, the Classic raised over $400,000 to fight drug and alcohol abuse. She is on the boards of numerous philanthropic organizations and has demonstrated an overwhelming commitment to the health needs of the citizens of New Jersey.

On Saturday, January 19, 1985, the Academy held a Retreat for its Board of Trustees at the Parsippany Hilton in Morris County. The event was attended by 26 Board members and several key staff and culminated with an evening dinner with spouses. The discussion was lively and stimulating and provided an excellent opportunity for the Board members to work together in a group effort. The overall purpose was to reflect on the Academy's current position and to explore its future direction. Numerous new ideas were discussed which are being referred to Academy committees for followup.

The following goals were agreed to by the members: 1) continue the educational mission of the Academy which was the impetus for its formation in 1911; 2) develop new products and services to meet needs of physicians; 3) expand income sources; and 4) increase membership by 10 percent per year for five years; and 5) establish a long-range planning committee.

The speaker at the February First Wednesday program was William J. "Terry" Kane, M.D. On March 6, 1985, the First Wednesday speaker was Dr. Robert Cassidy. His topic was "Medical Ethics in Terminal Care and the Problems This Is Presenting to Physicians."

Physicians Seeking Location in New Jersey

The following physicians have written to the Executive Offices of MSNJ seeking information on possible opportunities for practice in New Jersey. The information listed below has been supplied by the physician. If you are interested in any further information concerning these physicians, we suggest you make inquiries directly to them.

ALLERGY—Noah Barysh, M.D., 603A Old Nassau Rd., Jamesburg, NJ 08831. Chicago 1933. Board certified. Part time, 15 hrs/wk. Available.

FAMILY MEDICINE—Shahida Asifudin, M.D., 902 47th St., #LB5, Brooklyn, NY 11219. Osmania (India) 1976. Group, partnership, solo. Available.

Bruce A. Blumenthal, M.D., 5813 Berkeley Ave., Baltimore, MD 21215. George Washington 1978. Board certified. Group or partnership. Available July 1985.

Steven Luke, M.D., 3246 Abell Ave., Baltimore, MD 21218. SUNY 1982. Board eligible. Group or HMO. Available July 1985.

GASTROENTEROLOGY—James D. Kutch, M.D., 323 Obispo Ave., #207, Long Beach, CA 90814. UMDNJ 1979. Board eligible. Board certified (IM). Group or partnership. Available July 1985.

Pravin N. Patel, M.D., 15 St. Andrew's Pl., #25, Yonkers, NY 10705. Baroda (India) 1974. Also, internal medicine. Board certified (IM). Group, partnership, solo. Available July 1985.

INTERNAL MEDICINE—Maria Del Vecchio, M.D., 30 Rosewood Ter., Bloomfield, NJ 07003. UMDNJ 1981. Board eligible. Salaried or part-time (approx. 20 hours/week). Available.

Kathleen A. Gaioni, M.D., 8 Park Dr. West, West Orange, NJ 07052. UMDNJ 1982. Board eligible. Solo. Available July 1985.

Mohamed Khan, M.D., 1056 Woods La., Grosse Pointe Woods, MI 48236. King Edward (Pakistan) 1966. Board eligible. Group or solo. Available.

Bharat Kumar Mehta, M.D., Lafayette Hills Apts., #2C, Easton, PA 18042. MGM (India) 1978. Board eligible. Group or partnership. Available July 1985.

James C. McVeety, M.D., 713 South Birch Ave., Marshfield, WI 54449. Bologna 1975. Also, neurology. Board certified (IM); board eligible (N). Group, partnership, solo. Available.

Surendra K. Nevatia, M.D., 21 Heywood St., #2E, Worcester, MA 01604. Mahatma Gandhi Memorial (India) 1976. Solo, group, partnership. Available July 1985.

Pravin N. Patel, M.D., 15 St. Andrew's Pl., #25, Yonkers, NY 10705. Baroda (India) 1974. Also, gastroenterology. Board certified (IM). Group, partnership, solo. Available July 1985.

Mohamed Salem, M.D., 44 S. Munn Ave., East Orange, NJ 07018. Al Azhar (Egypt) 1977. Also, nephrology. Solo, group, clinic, hospital. Available June 1985.

Jason Weiner, M.D., 10 Dwight St., Poughkeepsie, NY 12601. Guadalajara 1980. Board eligible. Group or partnership. Available.

Joseph M. Weisgras, M.D., 160 West End Ave., Apt. 14E, New York, NY 10023. Juarez 1981. Board eligible. Group, partnership, associate, solo. Available.

NEPHROLOGY—Mohamed Salem, M.D., 44 S. Munn Ave., East Orange, NJ 07018. Al Azhar (Egypt) 1977. Also, internal medicine. Solo, group, clinic, hospital. Available June 1985.

NEUROLOGY—James C. McVeety, M.D., 713 South Birch Ave., Marshfield, WI 54449. Bologna 1975. Also, internal medicine. Board eligible (N); board certified (IM). Group, partnership, solo. Available.

OBSTETRICS/GYNECOLOGY—Ian J. Gluck, M.D., 269-03R Grand Central Pkwy., Floral Park, NY 11005. New York Medical College 1979. Board eligible. Group or partnership. Available July 1985.

Karen S. Juske, M.D., 21 W. 276 Crescent Blvd., Glen Ellyn, IL 60137.

Stritch-Loyola 1977. Board certified. Group, HMO, family planning clinic. Available.

ORTHOPEDICS—Andrew R. Goldstein, M.D., 27 High St., Apt. 3E, Orange, NJ. UMDNJ 1980. Board eligible. Group or partnership. Available July 1985.

PATHOLOGY—Yury Kogan, M.D., 60 Egmont St., Brookline, MA 02146. Second Moscow Medical Institute 1967. Board certified. Group or partnership. Available.

Adam G. Lang, M.D., 1436 Armacost Ave., Apt. 9, Los Angeles, CA 90025. Illinois 1980. Group or partnership. Available July 1985.

PEDIATRICS—Edgar Lyubling, M.D., 1401 Ocean Ave., Apt. 4H, Brooklyn, NY 11230. Moscow URSS 1967. Group or partnership. Available July 1985.

Boroumand Masood, M.D., 85-26 Van Wyck Expwy., Apt. 412, Briarwood, NY 11435. Tehran (Iran) 1968. Board certified. Group, partnership, solo, hospital. Available.

Kirti Vora, M.D., 41 E. White Ter., Nutley, NJ 07110. Baroda (India) 1975. Board certified. Group, partnership, staff position. Available.

PHYSICAL MEDICINE/REHABILITATION—Minaxi Vora, M.D., 41 E. White Ter., Nutley, NJ 07001. M.P. Shah (India) 1975. Group, partnership, solo, staff position. Available.

RADIOLOGY—Neil R. Kramer, M.D., 1000 Walnut St., Philadelphia, PA 19107. Temple 1980. Board eligible. Group or partnership. Available July 1985.

Richard Steinberg, M.D., 3701 Lindell Blvd., St. Louis, MO 63108. SUNY-Downstate 1980. Board eligible. Hospital-based or group-based practice with emphasis on CT and ultrasound. Available July 1985.

SURGERY—Nicholas G. Bonuicino, M.D., 130 W. 12 St., Apt. 5J, New York, NY 10011. New York Medical College 1979. Board eligible. Partnership or group. Available May 1985.

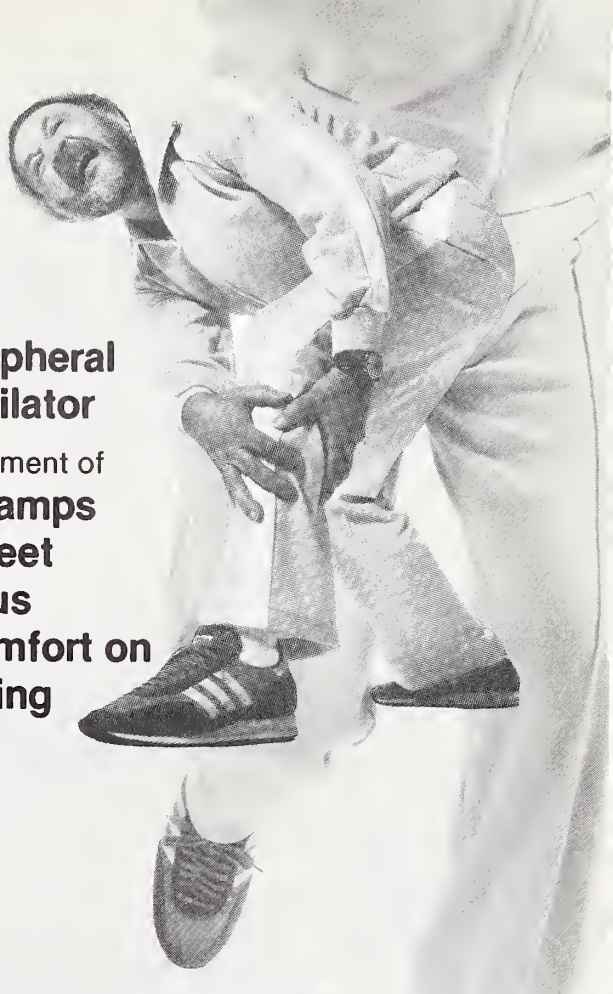
Naresh C. Nagpal, M.D., 323A Hayden St., Sayre, PA 18840. Maulana Azad (India) 1974. Board eligible. Solo, partnership, group. Available July 1985.

P.K. Sharma, M.D., 347 Vomel Dr., New Milford, NJ 07646. KGMC (India) 1973. Group or partnership. Available.

UROLOGY—Michael Bruce Kline, M.D., 3227 Jefferson Ave., #5, Cincinnati, OH 45220. Cincinnati 1980. Board eligible. Partnership or solo. Available August 1985.

Ned R. Novsam, M.D., 8300 Sawyer Brown Rd., E-306, Nashville, TN 37221. Boston 1974. Board eligible. Partnership or group. Available July 1986.

Binod Sinha, M.D., 3425 Golf View Dr., #105, Eageri, MN 55123. Prince of Wales 1976. Group, partnership, solo. Available July 1985.



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The Departments of Medicine and Medical Education of

HACKENSACK MEDICAL CENTER

announces a symposium on

CLINICAL LABORATORY DIAGNOSIS IN DISORDERS OF INFECTION AND IMMUNITY

Wednesday, April 17, 1985 8:00 A.M. to 4:45 P.M.

at

LOEWS GLENPOINTE HOTEL
TEANECK, N.J.

This course is designed for primary care physicians to provide practical information on the application of laboratory testing in the diagnosis and management of various disorders of infection and immunity. Lectures will be given by physicians who are national experts in their respective fields and will emphasize recent advances in laboratory evaluation in these clinical disorders.

SCHEDULE:

8:00 AM	Registration
8:30	GUIDE TO THE USE OF SOME AUTOIMMUNE IMMUNOLOGIC TECHNIQUES IN CLINICAL MEDICINE Burton Zwieman, M.D., University of Pennsylvania School of Medicine
9:15	EVALUATING THE CHILD WITH RECURRENT AND UNUSUAL INFECTIONS Joseph Bellanti, M.D., Georgetown University School of Medicine
10:00	Coffee Break
10:30	IDENTIFYING THE PATIENT WITH NEUTROPHIL DYSFUNCTION Richard Root, M.D., University of Washington School of Medicine
11:15	EFFICIENT USE OF THE MICROBIOLOGY LABORATORY IN EVALUATING SEPSIS Richard Tilton, M.D., University of Connecticut School of Medicine
12:00	Questions and Answers
12:30 PM	Lunch
1:30	LABORATORY EVALUATION OF THE ACQUIRED IMMUNODEFICIENCY SYNDROME Jeffrey Laurence, M.D., Cornell University Medical School
2:15	CULTURING THE PATIENT WITH INFECTIOUS DIARRHEA Richard Guerrant, M.D., University of Virginia School of Medicine
3:00	Tea Time
3:30	WHEN TO USE VIRAL TESTING IN RESPIRATORY INFECTIONS Peter A. Gross, M.D., University of Medicine and Dentistry of New Jersey
4:15	Questions and Answers
4:45	Adjourn

Registration Form

Name _____

Address _____

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Fee: Physician $50.00 ☐
Physician in Training $25.00 ☐
Other $50.00 ☐
(Fee includes conference, syllabus, lunch, coffee and tea breaks)

Complete this form, detach and mail with check payable to Hackensack Medical Center no later than April 10, 1985 to:

Mary Ann Michelis, M.D.
Course Director
Johnson Hall, Room 120
Hackensack Medical Center
Hackensack, New Jersey 07601

Course approved for 5½ hours of continuing medical education credits

CME CALENDAR

The following is a list of continuing medical education courses for the next two months. Contact the sponsoring organization for further information.

This list is compiled through the cooperation of the Committee on Medical Education of the Medical Society of New Jersey, The Academy of Medicine of New Jersey, the New Jersey Chapter of the American Academy of Family Physicians, and the Office of Continuing Medical Education of the UMDNJ. For information on accreditation, please contact the sponsoring organization(s), indicated by italics—last line of each item.

CARDIOLOGY

May

21 **Treatment of Chronic Refractory Heart Failures**
12 noon—St. Mary's Hospital, Orange
(AMNJ)

June

11 **Noncardiac Surgery in the Cardiac Patient**
12 noon—St. Mary's Hospital, Orange
(AMNJ)

14 **Pediatric Cardiology: 1985**
8-9:30 A.M.—Overlook Hospital, Summit
(Overlook Hospital and AMNJ)

MEDICINE

May

1 **Substance Abuse**
8:30 A.M.-1 P.M.—Alexian Brothers Hospital, Elizabeth
(AMNJ)

1
8
15
22
29 **Internal Medicine Review Course**
3-6 P.M.—Overlook Hospital, Summit
(Overlook Hospital and AMNJ)

1
8
15
22
29 **Endocrine Conferences**
3:30-5 P.M.—Rotates between Newark Beth Israel Medical Center, University Hospital, and United Hospitals Medical Center, Newark, VA Medical Center, East Orange
(Endocrinology Section, AMNJ)

1 **Drug-Drug Interactions**
10-11:30 A.M.—Essex County Hospital Center, Cedar Grove
(Essex County Hospital Center and AMNJ)

1 **Quantitative Histochemical Analysis as a Tool in Toxicology**
2 P.M.—UMDNJ-Rutgers, Busch Campus, Piscataway
(UMDNJ)

2-5 **219th Annual Meeting**
Americana Host Farm Resort, Lancaster
(Medical Society of New Jersey and AMNJ)

2 **Immunoregulation: Basic Concepts and Applications**
4-6 P.M.—Institute for Medical Research, Copewood St., Camden
(Institute for Medical Research and AMNJ)

2 **Nephrology Grand Rounds**
6:30-7:30 P.M.—Dialysis Unit, Community Memorial Hospital, Toms River
(Community Memorial Hospital and AMNJ)

2 **Distinguished Lecture Series—Parkinson's Disease**
11 A.M.-12 noon—St. Joseph's Hospital and Medical Center, Paterson
(St. Joseph's Hospital and Medical Center and AMNJ)

3
17 **Renal Conferences in Nephrology**
4-5 P.M.—Rutgers Medical School, Medical Education Bldg., Rm. 393
(Nephrology Society of NJ and AMNJ)

8 **Cutaneous Signs of Internal Disease**
1:30 P.M.—Essex County Hospital Center, Cedar Grove
(AMNJ)

9 **Stress and Disease**
11 A.M.-12 noon—St. Joseph's Hospital and Medical Center, Paterson
(St. Joseph's Hospital and Medical Center and AMNJ)

15 **Dermatological Conference**
6-9 P.M.—Rutgers Community Health Plan, 57 U.S. Hwy. 1, New Brunswick
(UMDNJ and AMNJ)

16 **Medical and Psychiatric Aspects of Drug and Alcohol Abuse**
2 P.M.—John E. Runnells Hospital, Berkeley Heights
(AMNJ)

16 **New Concepts in Antifibrinolytic Therapy**
5-7:30 P.M.—Somerset Medical Center, Somerville
(Somerset Medical Center and AMNJ)

June

5 **Asthma and COPD**
1:30 P.M.—Essex County Hospital Center, Cedar Grove
(AMNJ)

5 **Annual Meeting: Ulcers**
2-5 P.M.—Morristown Memorial Hospital
(NJ Gastroenterological Society and AMNJ)

6 **Nephrology Grand Rounds**
6:30-7:30 P.M.—Community Memorial Hospital, Toms River
(Community Memorial Hospital and AMNJ)

6 **Cancer in NJ: Epidemiologic Considerations**
11 A.M.—St. Joseph's Hospital and Medical Center, Paterson
(St. Joseph's Hospital and Medical Center and AMNJ)

7
21 **Renal Conferences in Nephrology**
4-5 P.M.—UMDNJ-Rutgers Medical School, Medical Education Bldg., Rm. 593
(Nephrology Society of NJ and AMNJ)

17-18 **Today's Therapy in Nephrology**
8 A.M.-5 P.M.—Resorts International, Atlantic City
(Nephrology Society of NJ and AMNJ)

17-19 **11th W. Franklin Keim Memorial Seminar**
All day—Caesar's Boardwalk Regency Hotel, Atlantic City
(UMDNJ and Newark Eye and Ear Infirmary)

19 **Dermatological Conference**
6-9 P.M.—Rutgers Community Health Plan, 57 U.S. Hwy. 1, New Brunswick
(UMDNJ and AMNJ)

20 **Correct Use of Antibiotics**
5-7:30 P.M.—Somerset Medical Center, Somerville
(Somerset Medical Center and AMNJ)

NEUROLOGY/PSYCHIATRY

May

2 **Psychoimmunology—The New Frontier**

9 **Prescribing for Geriatric Patients**

16 **Creative Therapy for Adolescents and Geriatrics**

30 **New Brain Imaging Techniques and Clinical Psychiatry**
12 noon-1 P.M.—Carrier Foundation, Belle Mead
(Carrier Foundation)

2
16 **Case Seminars**
8-10 P.M.—310 Harding Drive, South Orange
(Advanced Psychiatric Study Group and AMNJ)

6 **Anorexia Nervosa with Unusual Ideology**
8:15-10:30 P.M.—5 Fairfield Street, Montclair
(Essex Psychiatric Seminar and AMNJ)

10 **Centralized Residency Training**

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ACUPUNCTURE IN CLINICAL PRACTICE

N.Y. State Boards of Medicine & Dentistry 25-hour accredited seminar and workshop on the latest theories & techniques of manual & electro-acupuncture and TENS, applicable toward the 200-hour requirement for certification, will be given for licensed clinicians (with or without prior training) during the weekend of May 3-5, 1985 at the Barbizon Plaza Hotel, New York City. International Symposium on Acupuncture, Oct. 9-13, 1985. Co-sponsored by the International College of Acupuncture & Electro-Therapeutics, its official journal. Acupuncture & Electro-Therap. Res., Int.J. (published by Pergamon Press and indexed in 15 major indexing periodicals; INDEX MEDICUS, etc.), the Heart Disease Research Foundation and the Neuroscience Dept. of Long Island College Hospital, Pharmacology Dept. of The Chicago Medical School. Also eligible for AMA/CME credit. For information, contact Y. Omura, M.D., ScD., 800 Riverside Drive (8-1), NYC 10032. Tel: (212) 781-6262 or (212) WA8-0658, or Saul Heller, M.D., Tel: (212) 838-7514.

THE NEW YORK HOSPITAL-CORNELL MEDICAL CENTER

June 10-14, 1985

Update Your Medicine 1985. Association of Practicing Physicians of The New York Hospital and Cornell University Medical College. 37 hours Category I credit, 42 if both optional workshops are taken. 9 major review lectures, 16 workshops, 2 Meet the Professor luncheons, Grand Rounds and optional practical workshops in breast/pelvic and male genitorectal examinations. Held at New York Hospital-Cornell, 1300 York Avenue at 69th Street, New York.

Information: Office of CME, 212-472-6119 or 5600. Dr. Lila Wallis, Course Director.

Also, call us for information about Update Your Medicine, Ithaca course July 22-26, 1985.

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CARDIOLOGY UPDATE. . .

IS DESIGNED FOR THE PHYSICIAN AND PROVIDES AN INTENSIVE SURVEY OF THE CURRENT STATUS OF CLINICAL CARDIOLOGY. . .

WEDNESDAY, MAY 1, 1985

CORONARY ARTERY BYPASS GRAFTING

MODERATOR: BERNARD L. SEGAL, M.D.

3:00 CASE PRESENTATION — *Bruno Manno, M.D.*

3:30 SELECTION OF PATIENTS: INDICATIONS AND RESULTS — *Bernard L. Segal, M.D.*

4:00 CORONARY ARTERY SURGERY AFTER IV STREPTOKINASE — *Gary S. Mintz, M.D.*

4:30 CORONARY ARTERY BYPASS GRAFTING AFTER PERCUTANEOUS TRANSLUMINAL CORONARY ANGIOPLASTY — *Inder P. Goel, M.D.*

5:00 ANGIOPLASTY FOR SINGLE- AND MULTI-VESSEL CORONARY DISEASE — *Demetrios Kimbiris, M.D.*

LECTURE HALL "A"—2nd floor New College Building, Hahnemann University
15th and Vine Streets, Philadelphia, PA

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• CME CATEGORY I CREDITS CERTIFIED •
WINE & CHEESE SERVED FOLLOWING CONFERENCE

17 **Program and Psychiatric Lecture**
24 **Series**
1:30-5 P.M.—Trenton Psychiatric Hospital
(Division of Mental Health, Trenton Psychiatric Hospital, and AMNJ)

20 **Lecture Series**
8:30-10:30 P.M.—301 Broad Ave., Englewood
(NJ Psychoanalytic Society and AMNJ)

22 **Family Therapy and the Schizophrenic Patient**
9 A.M.-5 P.M.—Carrier Foundation, Belle Mead
(Carrier Foundation)

June

3 **Post-traumatic Stress Disorder and Depression**
8:15-10:30 P.M.—1046 South Orange Ave., Short Hills
(Essex Psychiatric Seminar and AMNJ)

6 **Medical Illness Presenting as Psychiatric Syndromes**

13 **DSM III Pros & Cons; and Beyond to DSM IV**

20 **DRGs for the Private Psychiatric Hospital**
12 noon-1 P.M.—Carrier Foundation, Belle Mead
(Carrier Foundation)

6 **Case Seminars**
20 8-10 P.M.—310 Harding Drive, South Orange
(Advanced Psychiatric Group and AMNJ)

7 **Centralized Residency Training**

14 **Program and Psychiatric Lecture Series**
1:30-5 P.M.—Trenton Psychiatric Hospital
(Trenton Psychiatric Hospital and AMNJ)

17 **The Impact of Rape on the Family**
1-4 P.M.—Fair Oaks Hospital, Summit
(Fair Oaks Hospital and AMNJ)

17 **Lecture Series**
8:30-10:30 P.M.—301 Broad Ave., Englewood
(NJ Psychoanalytic Society and AMNJ)

18- **Humor/Play/Religion as Healing**
19 **Powers**
9 A.M.-5 P.M.—Carrier Foundation, Belle Mead
(Carrier Foundation)

OBSTETRICS/GYNECOLOGY

June

7 **Annual Meeting**
9 A.M.-5 P.M.—Trump Plaza, Atlantic City
(NJ Obstetrical and Gynecological Society and AMNJ)

PATHOLOGY

May

10 **Pulmonary Pathology in the Newborn**
8-9:30 A.M.—Overlook Hospital, Summit
(Overlook Hospital and AMNJ)

18 **Monoclonal Antibody Use in Diagnoses of Infectious Disease**
8:30 A.M.-2 P.M.—Rutgers Medical School, Piscataway
(NJ Society of Pathologists and AMNJ)

PEDIATRICS

May

14 **Advanced Concepts in Neonatology/Perinatology**
6:30-7:45 P.M.—NJ Medical School, Newark
(UMDNJ)

June

14 **Pediatric Cardiology: 1985**
8-9:30 A.M.—Overlook Hospital, Summit
(Overlook Hospital and AMNJ)

RADIOLOGY

May

23 **Visiting Professorship Program**
1:30-5 P.M.—Saint Barnabas Medical Center, Livingston
(Saint Barnabas Medical Center and AMNJ)

June

15 **Echocardiography Workshops**
16 9 A.M.-5:30 P.M.—Nassau Inn, Princeton
(Practical Diagnostic Ultrasound Seminars and AMNJ)

19 **CAT Scanning of the Abdomen: Part II**
1:30-2:30 P.M.—Rutgers Community Health Plan, 57 U.S. Hwy. 1, New Brunswick
(Rutgers Community Health Plan and AMNJ)

SURGERY

May

14 **Surgical Grand Rounds**
7-9 A.M.—Hackensack Medical Center
(Hackensack Medical Center and AMNJ)

28 **Surgical Oncology Update**
8-10 P.M.—Englewood Club, Englewood
(Englewood Surgical Society and AMNJ)

June

4 **Surgical Grand Rounds**
25 7-9 A.M.—Hackensack Medical Center
(Hackensack Medical Center and AMNJ)

18 **Noncardiac Surgery in the Cardiac Patient**
12 noon—St. Mary's Hospital, Orange
(AMNJ)

25 **Diethylstilbesterol: Past, Present, and Future**
8-10 P.M.—Englewood Club, Englewood
(Englewood Surgical Society)

SURGICAL SPECIALTIES

May

2 **Vascular Surgical Rounds**
9 4-5 P.M.—Medical Education Bldg.,
16 Rm. 593, Rutgers Medical School,
23 New Brunswick
30 *(UMDNJ)*

June

6 **Vascular Surgical Rounds**
13 4-5 P.M.—Medical Education Bldg.,
20 Rm. 593, Rutgers Medical School,
27 New Brunswick
(UMDNJ-Rutgers Medical School)

MISCELLANEOUS

June

16 **Legal Aspects of Psychiatric Practice**
3 P.M.—Ancora Psychiatric Hospital, Hammonton
(AMNJ)

Medical Society of New Jersey 1985 Annual Meeting

The Medical Society of New Jersey will be conducting its 219th Annual Meeting, May 2 through May 5, 1985, at the Americana Host Farm Resort, in Lancaster, Pennsylvania.

You can plan your arrival for Thursday, May 2nd with a Sunday, May 5th departure.

There will be 500 rooms available at Host Farm Resort and an additional 100 rooms available in the immediate area.

The Hotel will maintain a shuttle bus service to and from the Host Farm Building and the Host Corral Building.

This Annual Meeting will have total exclusivity of all function rooms, dining rooms, golf and tennis facilities, entertainment, health clubs, swimming pools, two miles of bicycle and jogging trails, handball, etc.

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of
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Wednesday, May 29, 1985
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June 15, 1985

5TH ANNUAL ADVANCES IN GASTROENTEROLOGY

Golden Nugget Hotel
Atlantic City, New Jersey

Sponsored by the Gastrointestinal Section of the Hospital of the University of Pennsylvania and the Continuing Medical Education Department of the Underwood Memorial Hospital, Woodbury, New Jersey.

Category 1 credit offered.

Information: Registration Supervisor, Slack Incorporated, 6900 Grove Road, Thorofare, New Jersey 08086, 609-848-1000.

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11 th ANNUAL FAMILY MEDICINE REVIEW COURSE
June 23-28,1985
Carousel Hotel
Ocean City, Maryland

Sponsored by the
Department of Family Medicine
University of Maryland
School of Medicine

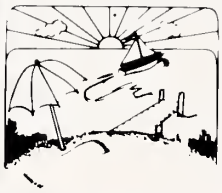
This course is designed to update the family physician in current concepts of medicine with emphasis on practical and clinical aspects of patient care. New diagnostic and therapeutic techniques will be presented, and major aspects of traditional care will be reviewed

For further information contact:

CME

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DERMATOLOGY DAYS



June 27-29,1985
CAROUSEL HOTEL
Ocean City, Maryland

Sponsored by the
Division of Dermatology
Department of Medicine
University of Maryland - School of Medicine

DERMATOLOGY DAYS will be composed of two concurrent symposia: one for the practicing generalist (internist, pediatrician and family physician), the second symposia is designed to help individual dermatologists. Dermatology Days is a symposium designed to help individual practitioners become aware of some of the most effective methods of diagnosis and management of dermatological problems as well as some of the newest advances in the field of dermatology. The course will focus on the use of live patients and much of the content will be derived from discussion of the actual cases presented.

In summary, this course will provide a comprehensive up-to-date exposure to many of the problems as well as current trends involved in the diagnosis and management of dermatological problems.

For further information contact:

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OBITUARIES

Drs. Belafsky; Darrow; Espineli; Fiscella; Kutteroff; Pappas; Permison; Prager; Rancaniello; Renna; Sall; Scanlan; Shpetner; Staub; Tambascia; Tolor; Waller

Dr. Henry A. Belafsky

A member of our Middlesex County component, Henry Abraham Belafsky, M.D., died on January 16, 1985. A native of Perth Amboy, born in 1907, Dr. Belafsky received his medical degree from Long Island College of Medicine, New York, in 1931. An obstetrician, he opened an office in Woodbridge; later he became a member of an obstetrical/gynecological group with offices in Perth Amboy and Edison. Dr. Belafsky was a member of the American Medical Association; he was a Fellow of the International College of Surgeons, and a Fellow of the American College of Obstetricians and Gynecologists. He was affiliated with Perth Amboy General Hospital. During World War II, Dr. Belafsky served in the medical department of the United States Army. He was a recipient of MSNJ's Golden Merit Award in recognition of his 50 years in medicine.

Dr. Gerald D. Darrow

Gerald Donald Darrow, M.D., a member of our Morris County component, died on November 20, 1984, at the untimely age of 53. Born in New York City, Dr. Darrow received his medical degree from the State University of Groningen, Holland, in 1956. He was a family practitioner with offices in Boonton, and had been affiliated with St. Clare's Hospital, Denville; Riverside Hospital, Boonton; and Hackettstown Community Hospital.

Dr. Danilo R. Espineli

At only 43 years of age, Danilo Rillo Espineli, M.D., died on December 7, 1984. Born in Manila, Philippine Islands, Dr. Espineli received his medical degree at the Institute of Medicine of Far Eastern University, Manila, in 1969. Until 1975, he remained in the Philippines, then emigrated to the United States, and practiced first in California and then in Pennsylvania. In 1979, he came to New Jersey, became a member of our Monmouth County component, and established pediatrics as his specialty. He was affiliated with Jersey Shore Medical Center, Neptune.

Dr. Philip Fiscella

At the venerable age of 88, Philip Fiscella, M.D., who had served as treasurer of Cape May County Medical Society up to the time of his death, died on December 15, 1984. Born in Philadelphia, Dr. Fiscella earned his medical degree at Temple University School of Medicine and was graduated in 1925. He established his practice in family medicine in Wildwood, and had been affiliated with Burdette-Tomlin Memorial Hospital, Cape May Court House. Dr. Fiscella was a member of the American Medical Association, and in 1975 was a recipient of MSNJ's Golden Merit Award honoring his 50 years in medicine.

Dr. Charles F. Kutteroff

At the venerable age of 92, Charles Frederick Kutteroff, M.D., a member of our Burlington County component, died on January 13, 1985. Born in McKee City, Dr. Kutteroff received his medical degree from Hahnemann Medical College and Hospital, Philadelphia, in 1921. For many years he was a general practitioner in the Frankford section of Philadelphia, until 1955 when he established a practice in Medford. Dr. Kutteroff was a member of the American Medical Association, and in 1971 he was among those who received MSNJ's Golden Merit Award, honoring his 50 years as a physician.

Dr. Emmanuel B. Pappas

A member of our Essex County component, Emmanuel Basil Pappas, M.D., died on November 25, 1984, at Saint Barnabas Medical Center. A native of Greece, born in 1923, Dr. Pappas received his medical degree from the Faculty of Medicine, National University of Athens, Greece, in 1953. He emigrated to the United States in 1955 and established a practice in obstetrics and gynecology in Livingston. He was board certified in his specialty, and had been affiliated with Saint Barnabas Medical Center, Livingston; Saint Michael's Medical Center, Newark; and East Orange General Hospital.

Dr. Michael Permison

A psychiatrist with offices in Union, Michael Permison, M.D., died in Overlook Hospital, Summit, on December 12, 1984. A member of our Essex County component, Dr. Permison was born in 1910 in Newark. He received his medical degree from the Medical Faculty of Heidelberg, Germany, in 1937. Dr. Permison had been affiliated with the Mount Carmel Guild Mental Health Center, Newark, for the past 17 years and had been on the staff of Elizabeth General Hospital. During World War II, Dr. Permison served in the United States Army.

Dr. Jacob Prager

A past president of the staff at Hackensack Medical Center, Jacob Prager, M.D., died on December 22, 1984, in Ann Arbor, Michigan, where he had been living since his retirement. Born in 1908, Dr. Prager received his medical degree from Columbia University's College of Physicians and Surgeons in 1934. He had practiced internal medicine in Hackensack for over 30 years. A member of our Bergen County component, Dr. Prager had been affiliated with Hackensack Medical Center and Bergen Pines County Hospital, Paramus. In 1984, he was a recipient of MSNJ's Golden Merit Award in recognition of his 50 years of medical practice.

Dr. Pasquale Racaniello

Pasquale Racaniello, M.D., chief of vascular surgery at St. Joseph's Hospital and Medical Center, Paterson, died at his home on December 14, 1984. A native of Italy, Dr. Racaniello received his medical degree from the University of Naples in 1948. He emigrated to the United States in 1950 and established his practice in Clifton. A member of our Passaic County component, and a member of the American Medical Association, Dr. Racaniello was board certified in both general and thoracic surgery. He had an impressive list of hospital affiliations including: Beth Israel, Saint Mary's, and Passaic General Hospitals, Passaic; St. Joseph's Hospital and Medical Center and Barnert Memorial Hospital, Paterson; Chilton Memorial, Pompton Plains; Greater Paterson General Hospital, Wayne; and Saddle Brook General Hospital.

Dr. Francis S. Renna

A proctologist in Morristown, Francis Stanley Renna, M.D., died on December 21, 1984. A native of Montclair, born in 1914, Dr. Renna received his medical degree from the University of Maryland School of Medicine in 1941. A member of our Morris County component, Dr. Renna was on the staff at Morristown Memorial Hospital.

Dr. Jack Sall

Jack Sall, M.D., a member of our Passaic County component, died on December 23, 1984, in St. Thomas, Virgin Islands. A general practitioner with emphasis on industrial medicine, Dr. Sall was born in Paterson in 1922 and earned his medical degree from Tulane University School of Medicine, New Orleans, in 1945. He was affiliated with Barnert Memorial Hospital, Paterson, and had been a member of the American Medical Association. During World War II, Dr. Sall served as a flight surgeon in the Air Force.

Dr. David B. Scanlan

A urological surgeon in Ventnor City, prior to his retirement in 1976, David Bernard Scanlan, M.D., died at his home there on December 18, 1984. A native of Atlantic City, born in 1914, Dr. Scanlan received his medical degree from Hahnemann Medical College, Philadelphia, in 1940. He had been chief of the surgical department at Shore Memorial Hospital, Somers Point, and a member of their board of governors. Dr. Scanlan, a member of our Atlantic County component, also had served on the staff of Atlantic City Medical Center, Burdette-Tomlin Memorial Hospital, Cape May Court House, and Our Lady of Mercy Hospital, Sea Isle City. He was a member of the American Medical Association, a Fellow of the American College of Surgeons, and a Diplomate of the American Board of Urologists. Dr. Scanlan had served aboard the American medical ship "Hope" twice, when it was stationed off the coasts of Africa and India.

Dr. Aaron F. Shpetner

An internist and cardiologist for Barnert Memorial Hospital, Paterson for over 30 years, Aaron Frederick Shpetner, M.D., died on December 30, 1984, at the age of 70. Born in New York City, Dr. Shpetner received his medical degree from Queens University Medical School, Ireland, in 1941. Dr. Shpetner was a member of our Passaic County component, a member of the American Medical Association, and a Fellow of The Academy of Medicine of New Jersey. During World War II, he served in the medical corps of the British Army, attaining the rank of major.

Dr. E. Milton Staub

Complications resulting from a heart attack took the life of E. Milton Staub, M.D., in Boca Raton, Florida, on January 13, 1985. A retired member of our Union County component, living in Florida, Dr. Staub was born in Philadelphia, Pennsylvania, in 1906. He earned his medical degree at the University of Michigan Medical School, and was graduated in 1930. A general surgeon, he opened an office in Westfield in 1931, and practiced there until his retirement in the mid-1970s. In 1964, Dr. Staub was honored for his years of service to the Children's Specialized Hospital, Westfield, where he was medical director. He was a member of the American Medical Association and a Fellow of the International College of Surgeons. In 1980, Dr. Staub received MSNJ's Golden Merit Award for 50 years in medicine.

Dr. John J. Tambascia

At the untimely age of 52, John Joseph Tambascia, M.D., died at Graduate Hospital, Philadelphia, on December 29, 1984. An internist, and a member of our Camden County component, Dr. Tambascia was born in Newark. He received his medical degree from Jefferson Medical College, Philadelphia, in 1959, and established a practice in Kendall Park. He was an assistant clinical professor at Rutgers Medical School, and had been affiliated with Carrier Clinic, Belle Mead, and The Medical Center at Princeton. Dr. Tambascia was a member of the American Medical Association, the American Geriatric Society, the American Thoracic Society, and the American College of Chest Physicians.

Dr. Stanley Tolor

Stanley Tolor, M.D., a member of our Union County component, died on December 12, 1984, at the advanced age of 86. Born in Odessa, Russia, Dr. Tolor received his medical degree from the University of Vienna, Austria, in 1929. He remained in Europe until 1938 when he emigrated to the United States and established a practice in general/internal medicine in Elizabeth. Dr. Tolor was affiliated with St. Elizabeth, Elizabeth General, and Alexian Brothers Hospitals, Elizabeth; he was a member of the American Medical Association, and a Fellow of The Academy of Medicine of New Jersey. In 1979, Dr. Tolor was honored to receive MSNJ's Golden Merit Award in recognition of his 50 years in medicine.

Dr. Alfonso H. Waller

At only 53 years of age, Alfonso Hillman Waller, M.D., died on January 1, 1985. Born in Vienna, Austria, Dr. Waller received his medical degree from Salamanca University, Spain, in 1959. He emigrated to the United States in 1960, established an office in general medicine in Union City, and served as anesthetist at North Hudson Hospital, Weehawken, and Riverside Hospital, Secaucus.

Book Reviews

Current Obstetric & Gynecologic Diagnosis & Treatment; General Urology; Poison in the Pot; Radiology of Orthopedic Procedures, Problems and Complications; Review of General Psychiatry

Current Obstetric & Gynecologic Diagnosis & Treatment, 5th Edition

Ralph C. Benson, M.D., (ed). Los Altos, CA, Lange Medical Publications, 1984. Pp. 1,082. Illustrated. ($26.50)

This latest edition of Dr. Benson's comprehensive manual, updated after approximately two years since the previous edition, appears again to have the depth and content of its predecessor. The book especially will be valuable to practitioners as a quick reference and review guide and even could serve as a review vehicle for one taking the current examinations in obstetrics and gynecology.

Chapters have been expanded and others pruned of outdated and obsolete material. The basic science chapters are well illustrated even to the point that most of the drawings could be adaptable to coloring as an aid in learning (by the student). The references at the chapter endings for the most part are from recent publications. Of special interest was the chapter on medical-legal problems pertaining to obstetrics and gynecology.

To summarize, I highly recommend this text for the student and specialist alike in the continuing crusade for excellence in this medical specialty.

Earl Kanter, M.D.

General Urology 11th Edition

Donald R. Smith, M.D., (ed). Los Altos, CA, Lange Medical Publications, 1984. Pp. 661. Illustrated. ($24)

Dr. Donald Smith has expanded significantly the scope of coverage of this comprehensive analysis of the field of urology. The number of authors has increased to 33, and the number of pages has increased by 10 percent. The 36 chapter titles include anatomy, embryology, symptoms, physical examination, diseases of each organ in the urinary system, and specific disease entities such as stones, tumors, and renovascular hypertension. Immunology, renal transplantation, skin diseases of the external genitalia, and the effects of psyche on kidney and bladder function each are given a chapter. There is a completely new chapter on interventional uroradiology, and the others have been revised extensively.

As each chapter is so clearly organized with headings such as pathogenesis, clinical findings, differential diagnosis, and treatment, this book is highly recommended for the generalist and also for the urologist and nephrologist. The chapters are concise so that the physician can get an excellent overview of a subject in a few minutes. In addition, there is an extensive list of current references after each chapter for pursuing a subject in depth.

The book is well written and extensively illustrated. It is a very worthwhile addition to the library of every physician who sees patients with urological diseases.

Robert H. Stackpole, M.D.

General Urology, 11th Edition

Donald R. Smith, M.D., (ed). Los Altos, CA, Lange Medical Publications, 1984. Pp. 661. Illustrated. ($24)

The 11th edition of Smith's book not only brings it up to date, but attests as well to its continued popularity. We have used this text at our hospital for teaching medical students, but it is complete enough to be studied by urologic residents, and to be used as a reference book for urologists.

The various chapters are written by authorities in their fields, most of them prominent names in urology; New Jersey is represented by Prof. I. Kathleen Hagen of Rutgers.

New techniques in endourology, including percutaneous stone extraction, are covered, as well as extracorporeal shock wave lithotripsy.

Illustrations are copious, as are the bibliographies at the end of each chapter.

I picked up information I had not known, such as the length of a Foley catheter (16-⅞ inches).

Comprehensive without being verbose, this text can be recommended confidently to students, residents, urologists, and others who encounter urologic problems.

Robert Zufall, M.D.

Poison in the Pot: The Legacy of Lead

Richard P. Wedeen. Carbondale, IL, Southern Illinois University Press, 1984. ($24.95)

Written by a New Jersey physician, this stimulating book primarily is concerned with a detailed account of lead poisoning throughout the ages.

One excellent feature of this book is the frequent interpolation of excerpts from well-known authorities; it is by Wedeen's skillful interpretations and comments on these that we gently are led through the Middle Ages and the Renaissance to 17th century Britain. It was here that the introduction of Portuguese wines in lead-lined casks brought on an epidemic of colic or the "gripes" accompanied by palsies, bladder stones, and gout. While the latter two are not attributed to lead itself, the damaging effects on the kidneys of excessive exposure to the metal may have resulted in high uric acid concentrations and its complications. Numerous illustrations add interest to this major section of the book.

In the last chapter, our author discusses the development of scientific studies in renal pathology, tracing the line of descent from Malpighi to Richard Bright.

Finally, anyone who reads through the lines of this thought-provoking book, cannot fail to be impressed by the reactionary attitude so frequently assumed by the profession to innovations of all kinds. Even when colchicine—the standard drug still used today—was introduced, it was met by skepticism and dismissed as useless. If we are looking for some consolation for the problems of public relations besetting the profession today, this book can supply numerous instances in earlier periods when the image of the doctor shone hardly more brightly than it does today.

Morris H. Saffron, M.D.

Radiology of Orthopedic Procedures, Problems and Complications, Volume 24

Martin I. Gelman, M.D. Philadelphia, PA, W.B. Saunders Company, 1984. Pp. 196. Illustrated. ($32)

Dr. Gelman of the University of Utah Medical School has written an excellent book on the radiology of orthopedic procedures that will appeal to radiologists, orthopedists, and residents as well as practitioners in each field.

In a most lucid manner Gelman describes the various injuries to different parts of the skeleton system and their orthopedic treatment. Rheumatologic diseases and congenital abnormalities and their surgical treatment also are discussed. Although this book is not intended to be an encyclopedic description of all orthopedic diseases and their treatment, it does briefly describe the most common diseases that come across the desk of the working radiologist. As such it is a good introduction to the subject for the resident in training and an excellent review for the practicing physician. Most of the illustrations are adequate and sufficient to accompany the text.

In today's world, where the radiologist is concerned about computerized tomography, NMR, biopsies, and drainages of abscesses, he often considers such mundane topics as fractures and their orthopedic treatment as unimportant subjects to review. This small book makes such a review easy and palatable. I recommend the reading of this book to all radiologists.

Sidney Ketyer, M.D.

Review of General Psychiatry

Howard H. Goldman, M.D., (ed). Los Altos, CA, Lange Medical Publications, 1984. Pp. 696. Illustrated. ($24)

Until recently, there were few psychiatric textbooks which could be recommended to the second- or third-year medical students with the expectation that they would find them not too little or too large but just right. The *American Handbook* and *Comprehensive Textbook* were too encyclopedic; the *Harvard Guide* lacked a clear focus although it was very good in parts; *Modern Synopsis* still was intimidatingly large with over 1,000 pages in spite of its title. In 1977, Gregory and Smeltzer produced an excellent work called *Psychiatry: Essentials of Clinical Practice, with Examination Questions, Answers, and Comments*, and a second edition appeared in 1983.

In 1984, two more textbooks appeared. Waldinger's *Psychiatry for Medical Students* is a one-man book designed to provide the basics of psychiatry for medical students; it is very well accepted by medical students, but probably is too brief to be used without either larger texts or looking up the useful end-of-chapter references. The latest book to appear is Goldman's *Review of General Psychiatry*, a newcomer to the well-known Lange "Concise Medical Library for Practitioner and Student."

These softbound texts, in a wide variety of basic and clinical fields, have assisted most of us in our medical student days; they are comprehensive, inexpensively produced, and regularly rewritten. Goldman recently was director of medical student education in psychiatry at the University of California, San Francisco, and almost all of over 50 chapter authors have been active teachers in the same program. His text is a thoroughly up-to-date work, with references up to 1984 solidly based on DSM III yet able to look back on conceptual issues raised in earliest times.

Goldman's work is distinguished by "illustrative cases," brief case histories which illumine the descriptive paragraphs of the text and remind us that psychiatry is concerned with real people and not hypothetical diagnostic constructs. The editor aims "to present psychiatry with the proper mix of brain, mind, and wit." I think he has been successful in doing so and I heartily recommend this book to medical students and to physicians who want to replace their outdated psychiatry text with a modern work at very reasonable cost.

A. Arthur Sugerman, M.D.

AUTHOR INFORMATION

Style Sheet

The Journal is the official organ of the Medical Society of New Jersey. The goals of* The Journal *are educational and informational. All material published in* The Journal *is copyrighted by MSNJ.

CONTENT

The educational content of each issue appears as scientific articles, based on research, original concepts relative to epidemiology of disease, and treatment methodology; case reports based on unusual clinical experiences; review articles; clinical notes, succinct items on some aspect or new observation or technique of a case experience; and special articles, which include evaluations, policy and position papers, and reviews of nonscientific subjects. Other topics include commentary (critical narration); medical history; therapeutic drug information; pediatric briefs; nutrition update; and an opinion column. Editorials are prepared by the Editor and by guest contributors on timely and relevant subjects; editorials are the responsibility of the author. The Doctors' Notebook section contains organizational, informational, and administrative items from MSNJ and from the community. Letters to the Editor and book reviews are welcome and will be published as space permits. The principal aim in the preparation of a contribution should be relevance to diagnosis and treatment and to education of patients and professionals. Preference will be given to professional authors from New Jersey and to out-of-state lecturers who submit a suitable manuscript based on a presentation made in New Jersey.

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1. Goldwyn RM: Subcutaneous mastectomy. *J Med Soc NJ* 74:1050-1052, 1977.

2. Dixon WJ, Massey FJ: *Introduction to Statistical Analysis.* New York, NY, McGraw-Hill, 1969, pp. 42-48.

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Receipt of each manuscript will be acknowledged and a copy delivered to the Editor who refers the paper to one or more members of the Editorial Board. The final decision is reserved for the Editor. No direct contact between the reviewers and the authors will be permitted, but authors will be informed of the reviewers' comments. The publication lag for original articles may be six months or more. Galley proofs will be submitted to the author for correction of typographical errors.

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*"Cancer of the Colon and Rectum: Summary of Public Attitude Survey," *Ca* 33:359-365, 1983 (Nov.-Dec.)

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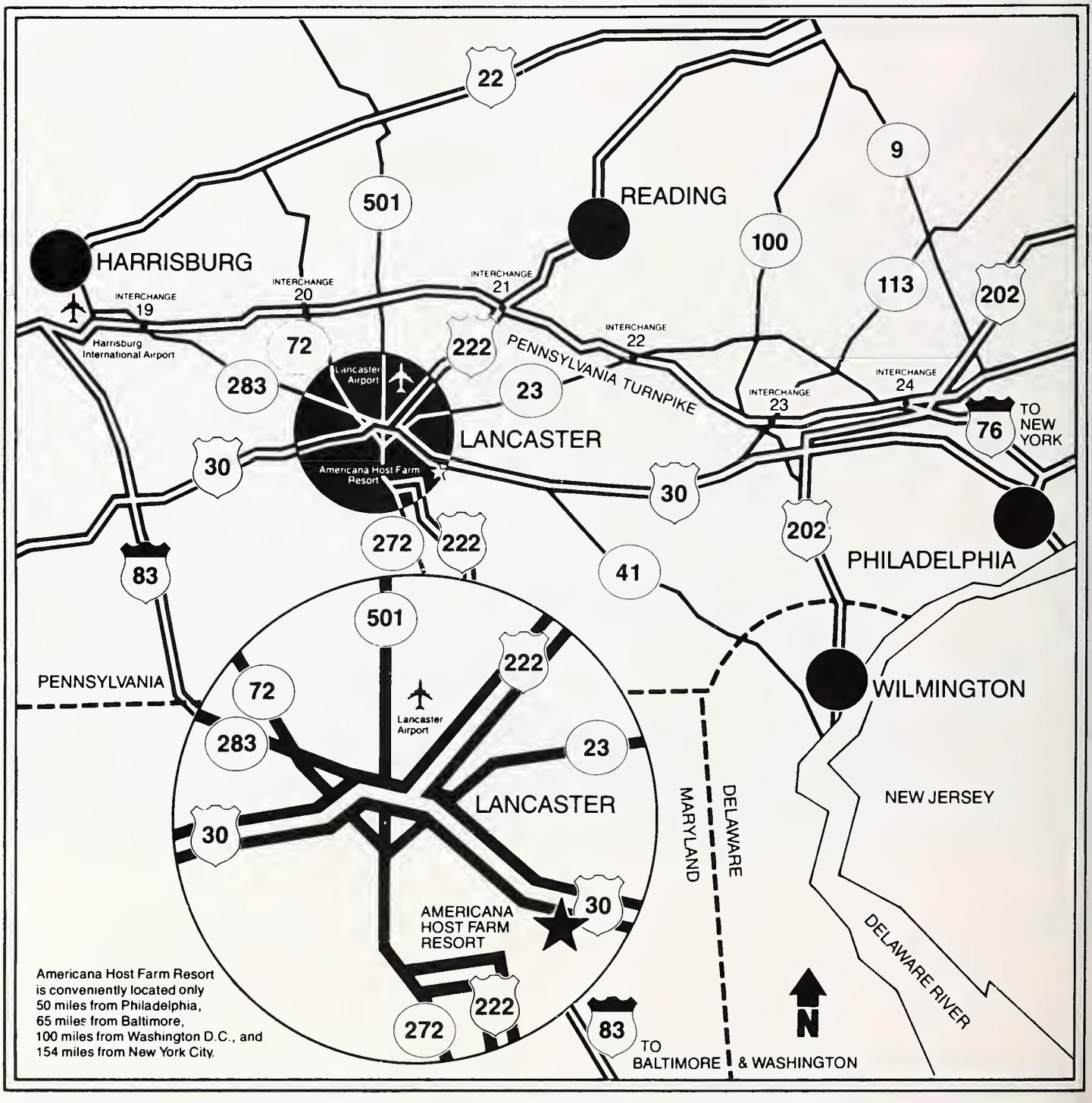
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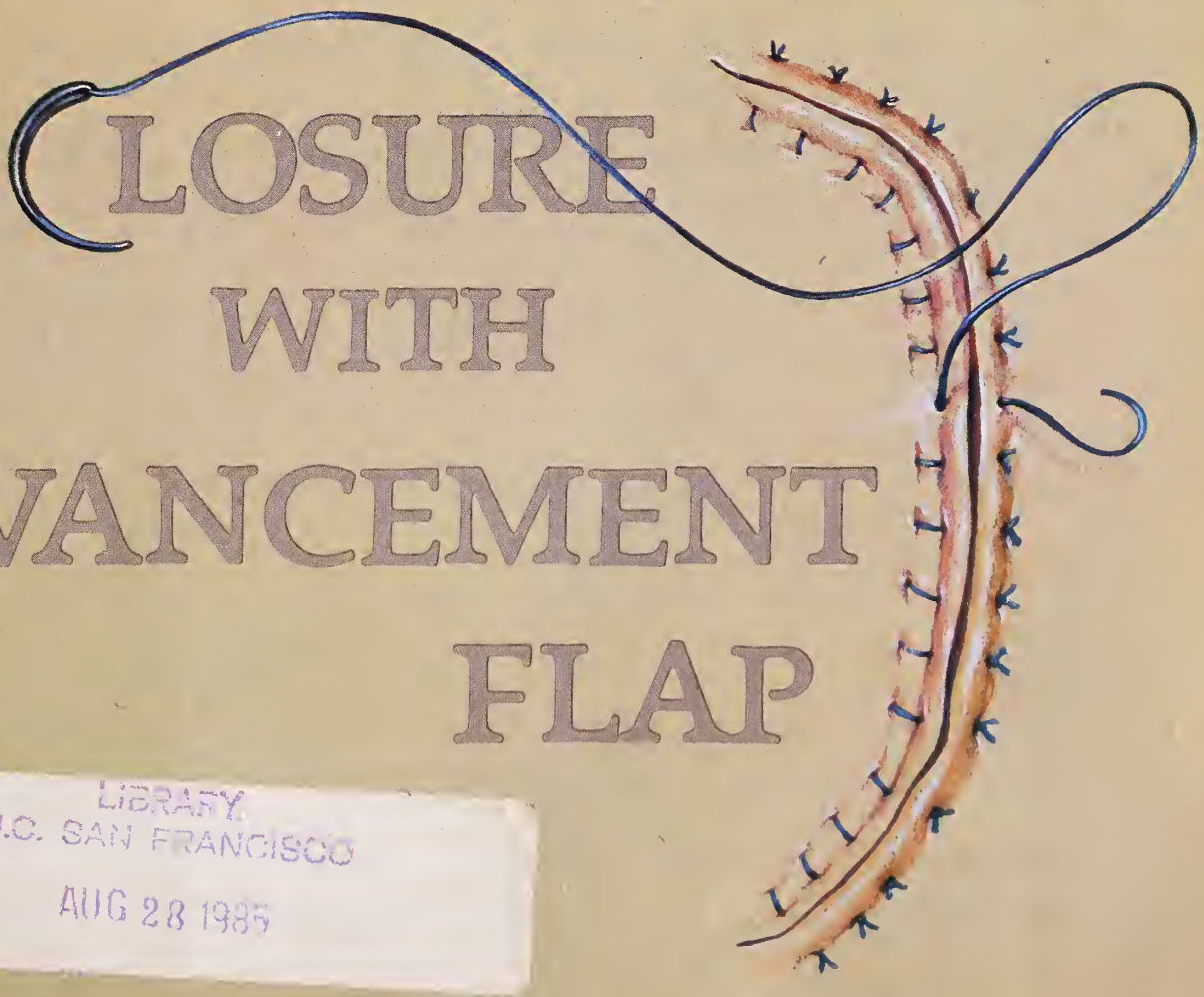
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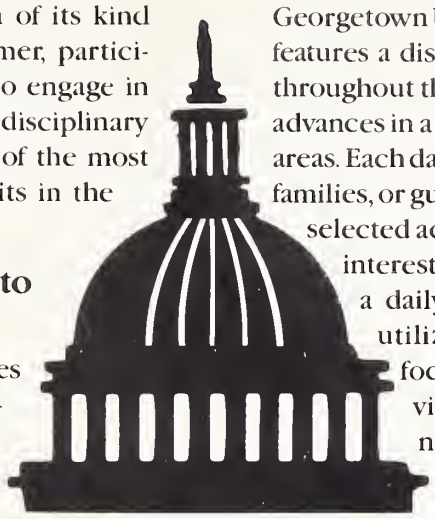
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MAY 1985

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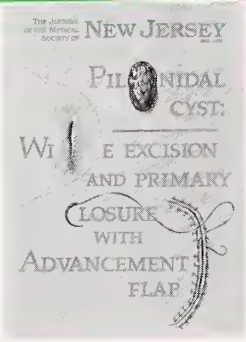
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NOTICE OF RULE MAKING: ADMINISTRATION MANUAL GENERAL PROVISIONS

The Division of Medical Assistance and Health Services has proposed to readopt the Administration Manual (N.J.A.C. 10:49-1) in accordance with Executive Order No. 66 (1978). The full text of the proposal appeared in the March 4, 1985, issue of the *New Jersey Register*. The major changes include revisions to the sections entitled "Who Is Eligible for Medicaid" (10:49-1.1) and "Eligible Providers" (10:49-1.3). Both sections really are being updated to reflect current policy in identifying a Medicaid-eligible patient and the procedures for provider enrollment.

NOTICE OF PROPOSED RULE MAKING: IMMUNIZATIONS

The Division of Medical Assistance and Health Services has proposed an increase in the fee schedule for certain procedure codes related to immunizations. The proposal appeared in the March 4, 1985, issue of the *New Jersey Register*.

URGENT: BIOLOGIC RECALL

Wyeth Laboratories has recalled from the market all supplies of its Wyvac® Rabies Vaccine. Recent studies of serologic responses to the vaccine, just brought to Wyeth's attention by the Centers for Disease Control (CDC), suggest that antibody response after rabies postexposure prophylaxis provided by the product is suboptimum.

Despite the fact that Wyvac® met all applicable release standards at the time of release and again when subsequently tested, certain patients (approximately 5 percent of vaccinees) in CDC's studies have failed to achieve neutralizing antibody titers consistent, in the judgment of the U. S. Public Health Service, with ideal antibody response. There is no explanation for this finding.

Wyeth recommends that all persons who were potentially exposed to rabies since October 15, 1984, and received postexposure prophylaxis with Wyeth Wyvac® Rabies Vaccine should receive one intramuscular booster with Merieux Rabies Vaccine in the deltoid area, unless sera obtained for medical reasons after postexposure prophylaxis demonstrate an acceptable antibody titer. Serologic testing is recommended if a systemic allergic reaction (serum sickness or urticaria) occurred during postexposure prophylaxis. In that case serologic testing may replace booster administration. Serum testing continues to be indicated if a patient who received postexposure prophylaxis is immunosuppressed (by diseases or medications).

We would emphasize booster doses are recommended only for postexposure patients; there is no reason to believe that persons who have received pre-exposure immunization are immunized inadequately. Arrangements to defray the expenses of administering a booster dose to those postexposure patients since October 15, 1984, can be made by contacting your Wyeth representative or by calling 1-800-321-2304.

BETA-BLOCKER DEAFNESS

Beta-blockers, such as propranolol and metoprolol, are very popular medications for high blood pressure and a number of diseases of the heart. Their side effects, including weakness, slow pulse, an unpleasant sensation in the chest during exercise when the heart is not quite able to pump fast enough to meet the body's increased demands, and even an occasional case of arthritis, have been well-documented. Deafness, however, only rarely has been described and a report in the *British Medical Journal* (289:1490,1985) adds another case to the series. It is an important case because it suggests that treatment with a beta-blocker often may be overlooked as the cause of deafness. Possibly, these drugs cause arthritis of the joints between

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SHAPIRO, M.D., Daniel W., **OB & GYN,** 50 Princeton-Hightstown Rd., P.O. Box 752, 08550. Tel 799-5616. B'46. NYU '71. 26628. D-OG. MER CO. Att, Med Ctr, Princeton. Cour, Fuld, Trenton.

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CORRECTIONS

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the middle ear ossicles, the three tiny bones that magnify sound-induced vibrations of the eardrum and convey them to the inner ear's organ of hearing. This idea is not so far-fetched since beta-blockers do sometimes cause arthritis between the bones of other joints. Furthermore, like arthritis that is caused by beta-blockers, the deafness described in the *Journal* cleared up in a few weeks after the drug had been discontinued. Therefore, it is to important to stop taking a beta-blocker (if possible) just as soon as deafness appears. If the drug is continued, more permanent hearing loss may occur. Fortunately, other drugs can be used in most cases.

MEDICARE PROGRAM: PAYMENT TO HMO AND COMPETITIVE MEDICAL PLANS

The AMA objected to the implementation of regulations to authorize Medicare payment to Health Maintenance Organizations (HMO) and Competitive Medical Plans (CMP). The Association pointed out that: 1) the regulations would result in additional program expenditures of up to $65 million; 2) modifications had been made to the regulations without opportunity for public comment; and 3) serious questions about the delivery of health care services through HMO and CMP have yet to be answered. (Statement, February 20, 1985, to the Health Care Financing Administration.)

DRAFT MEDICAL MALPRACTICE IMPROVEMENTS AND STUDY ACT

Although the American Medical Association finds certain interesting and commendable provisions in a proposed draft bill to require structured settlements for awards in excess of $100,000, the AMA could not support it because it does not go far enough towards system reform and believes that the broader program outlined in the Action Plan of the AMA Special Task Force on Professional Liability and Insurance is preferable. (Letter to Representative Ron Wyden (D-OR), February 25, 1985.)

PROVISION OF HEALTH CARE FOR AN ELDERLY POPULATION

The AMA expressed concern over "the impact of changes in the Medicare program on the ability of physicians and hospitals to assure the availability of high-quality health care services for the Medicare population." The Association addressed projected FY86 budget cuts in Medicare reimbursement for hospital and physician services, and implementation of the prospective pricing system for hospital services, and this system's potential impact on the quality of health care. (Testimony, February 26, 1985, to the Select Committee on Aging of the House of Representatives.)

ACCEPTED MEDICAL USE UNDER THE CONTROLLED SUBSTANCES ACT

The AMA responded to a request by the Drug Enforcement Administration for its view concerning the meaning of the term "accepted medical use" under the Controlled Substances Act. The AMA stated that reliable scientific evidence must exist that the drug is safe and effective for its proposed use, the reliable scientific evidence must be supported by collegial medical opinion, and the drug must be legally marketed in the United States. (Letter of March 5, 1985, to the Drug Enforcement Administration.)

HCFA CONSULTATION WITH PHYSICIANS

The AMA called on HCFA to consult with clinically experienced practicing physicians on all determinations affecting medical practice and patient care. While HCFA staff includes physicians, HCFA decisions have a major impact on services available to patients and, therefore, consultation with physicians in active practice would improve such decisions. (Letter to Carolyne K. Davis, Health Care Financing Administration, March 1, 1985.)

NATIONAL BOXING SAFETY CENTER

A National Boxing Safety Center, under the medical direction of Max M. Novich, M.D., has been established at United Hospitals Medical Center, Newark. The Center has five major goals: to prevent unnecessary injuries; to promote boxing safety in the ring; to provide followup care after a bout; to conduct research; and to make recommendations to governing bodies. For further information about the Center, please call, 1-201-268-8087.

CALL FOR "ANDY CAP"

The American Medical Soccer Association, sports medicine's newest group of medical athletes and enthusiasts, has been established for the purpose of exchanging medical and general information concerning the most popular sport in the world, soccer. The AMSA hopes to have occasional competitive events for its members. Applications for membership may be obtained by contacting Dr. Noah S. Finkel, 205 E. Main St., Huntington, NY 11743.

AMA COMMENT: PRO PROGRAM

The AMA urged the HCFA to "establish an informal, easy-access procedure for discussing and resolving issues of concern relating to the PRO program." The Association stated that the establishment of such a mechanism would provide interested parties—HCFA and representatives of practicing physicians, hospitals, and PROs—with the opportunity to resolve problems quickly and before they became a major controversy. (Letter, Health Care Financing Administration, February 28, 1985.)

FINI

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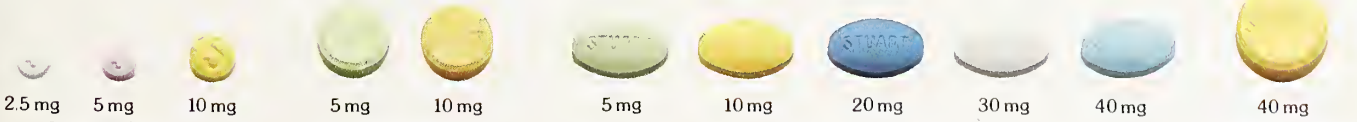


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INDICATIONS AND USAGE: SORBITRATE (isosorbide dinitrate) is indicated for the treatment and prevention of angina pectoris. All dosage forms of isosorbide dinitrate may be used prophylactically to decrease frequency and severity of anginal attacks and can be expected to decrease the need for sublingual nitroglycerin.

The sublingual and chewable forms of the drug are indicated for acute prophylaxis of angina pectoris when taken a few minutes before situations likely to provoke anginal attacks. Because of a slower onset of effect, the oral forms of isosorbide dinitrate are not indicated for acute prophylaxis.

CONTRAINDICATIONS: SORBITRATE is contraindicated in patients who have shown purported hypersensitivity or idiosyncrasy to it or other nitrates or nitrites. Epinephrine and related compounds are ineffective in reversing the severe hypotensive events associated with overdose and are contraindicated in this situation.

WARNINGS: The benefits of SORBITRATE during the early days of an acute myocardial infarction have not been established. If one elects to use organic nitrates in early infarction, hemodynamic monitoring and frequent clinical assessment should be used because of the potential deleterious effects of hypotension.

PRECAUTIONS: General: Severe hypotensive response, particularly with upright posture, may occur with even small doses of SORBITRATE. The drug should therefore be used with caution in subjects who may have blood volume depletion from diuretic therapy or in subjects who have low systolic blood pressure (eg, below 90 mmHg). Paradoxical bradycardia and increased angina pectoris may accompany nitrate-induced hypotension. Nitrate therapy may aggravate the angina caused by hypertrophic cardiomyopathy.

Marked symptomatic, orthostatic hypotension has been reported when calcium channel blockers and organic nitrates were used in combination. Dose adjustment of either class of agents may be necessary.

Tolerance to this drug and cross-tolerance to other nitrates and nitrites may occur. Tolerance to the vascular and antianginal effects of isosorbide dinitrate or nitroglycerin has been demonstrated in clinical trials, experience through occupational exposure, and in isolated tissue experiments in the laboratory. The importance of tolerance to the appropriate use of isosorbide dinitrate in the management of patients with angina pectoris has not been determined. However, one clinical trial using treadmill exercise tolerance (as an end point) found an 8-hour duration of action of oral isosorbide dinitrate following the first dose (after a 2-week placebo washout) and only a 2-hour duration of effect of the same dose after 1 week of repetitive dosing at conventional dosing intervals. On the other hand, several trials have been able to differentiate isosorbide dinitrate from placebo after 4 weeks of therapy and, in open trials, an effect seems detectable for as long as several months.

Tolerance clearly occurs in industrial workers continuously exposed to nitroglycerin. Moreover, physical dependence also occurs since chest pain, acute myocardial infarction, and even sudden death have occurred during temporary withdrawal of nitroglycerin from the workers. In clinical trials in angina patients, there are reports of anginal attacks being more easily provoked and of rebound in the hemodynamic effects soon after nitrate withdrawal. The relative importance of these observations to the routine, clinical use of isosorbide dinitrate is not known. However, it seems prudent to gradually withdraw patients from isosorbide dinitrate when the therapy is being terminated, rather than stopping the drug abruptly.

Information for Patients: Headache may occur during initial therapy with SORBITRATE. Headache is usually relieved by the use of standard headache remedies or by lowering the dose and tends to disappear after the first week or two of use.

Drug Interactions: Alcohol may enhance any marked sensitivity to the hypotensive effect of nitrates.

Isosorbide dinitrate acts directly on vascular smooth muscle; therefore, any other agent that depends on vascular smooth muscle as the final common path can be expected to have decreased or increased effect depending on the agent.

Carcinogenesis, Mutagenesis, Impairment of Fertility: No long-term studies in animals have been performed to evaluate the carcinogenic potential of this drug. A modified two-litter reproduction study in rats fed isosorbide dinitrate at 25 or 100 mg/kg/day did not reveal any effects on fertility or gestation or any remarkable gross pathology in any parent or offspring fed isosorbide dinitrate as compared with rats fed a basal-controlled diet.

Pregnancy Category C: Isosorbide dinitrate has been shown to cause a dose-related increase in embryotoxicity (increase in mummified pups) in rabbits at oral doses 35 and 150 times the maximum recommended human daily dose. There are no adequate and well-controlled studies in pregnant women. SORBITRATE should be used during pregnancy only if the potential benefit justifies the potential risk to the fetus.

Nursing Mothers: It is not known whether this drug is excreted in human milk. Because many drugs are excreted in human milk, caution should be exercised when SORBITRATE is administered to a nursing woman.

Pediatric Use: The safety and effectiveness of SORBITRATE in children has not been established.

ADVERSE REACTIONS: Adverse reactions, particularly headache and hypotension, are dose-related. In clinical trials at various doses, the following have been observed.

Headache is the most common (reported incidence varies widely, apparently being dose-related, with an average occurrence of about 25%) adverse reaction and may be severe and persistent. Cutaneous vasodilation with flushing may occur. Transient episodes of dizziness and weakness, as well as other signs of cerebral ischemia associated with postural hypotension, may occasionally develop (the incidence of reported symptomatic hypotension ranges from 2% to 36%). An occasional individual will exhibit marked sensitivity to the hypotensive effects of nitrates and severe responses (nausea, vomiting, weakness, restlessness, pallor, perspiration, and collapse) may occur even with the usual therapeutic dose. Drug rash and/or exfoliative dermatitis may occasionally occur. Nausea and vomiting appear to be uncommon. Case reports of clinically significant methemoglobinemia are rare at conventional doses of organic nitrates. The formation of methemoglobin is dose-related and, in the case of genetic abnormalities of hemoglobin that favor methemoglobin formation, even conventional doses of organic nitrate could produce harmful concentrations of methemoglobin.

DOSAGE AND ADMINISTRATION: For the treatment of angina pectoris, the usual starting dose for sublingual SORBITRATE is 2.5 to 5 mg; for chewable tablets, 5 mg, for oral (swallowed) tablets, 5 to 20 mg, and for controlled-release forms, 40 mg.

SORBITRATE should be titrated upward until angina is relieved or side effects limit the dose. In ambulatory patients, the magnitude of the incremental dose increase should be guided by measurements of standing blood pressure.

The initial dosage of sublingual or chewable SORBITRATE for prophylactic therapy in angina pectoris patients is generally 5 or 10 mg every 2 to 3 hours. Adequate controlled clinical studies demonstrating the effectiveness of chronic maintenance therapy with these dosage forms have not been reported.

SORBITRATE in oral doses of 10 to 40 mg given every 6 hours or in oral controlled-release doses of 40 to 80 mg given every 8 to 12 hours is generally recommended. The extent to which development of tolerance should modify the dosage program has not been defined. *The oral controlled-release forms of isosorbide dinitrate should not be chewed.*

DOSAGE FORMS AVAILABLE: Sublingual Tablets (2.5, 5, 10 mg), Chewable Tablets (5, 10 mg), Oral Tablets (5, 10, 20, 30, 40 mg); Sustained Action Tablets (40 mg).

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Nursing Home Residents' Right To Refuse Treatment

The Conroy Decision; Rates for Psychiatrists; Failure to Diagnose and Consult

On January 17, 1985, in the case of *In re Conroy*, the Supreme Court of New Jersey held that life-sustaining treatment may be withheld or withdrawn from an incompetent patient in a nursing home whose mental and physical functioning severely and permanently are impaired and whose life expectancy is relatively short, when it is clear that the patient would have refused the treatment. Further, the Court held that where a patient had not indicated clearly he or she would wish to be continued on such treatment, it may be withdrawn or withheld upon proof that the burdens of a patient's continued life outweigh the benefits of that life. In the course of its opinion, the Court outlined necessary procedures to be followed prior to withholding or withdrawing life-sustaining treatment.

The Court's decision in *Conroy* was based on the fundamental tenet that an individual has the right of self-determination as to what shall be done with his own body. Encompassed within this concept is the right to information necessary to evaluate the risks and benefits of proposed medical treatment, i.e. informed consent, and "the right to decline to have any medical treatment initiated or continued." That is not to say that the right is absolute. There are countervailing societal interests which have been identified by the courts which may limit a patient's right to refuse treatment, namely, the preservation of life of a particular patient, preservation of the sanctity of life, safeguarding the integrity of the medical profession, and protection of innocent third parties. Thus, the Court emphasized, "When the patient's exercise of his free choice could adversely and directly affect the health, safety, or security of others, the patient's right of self-determination frequently must give way."** However, in the absence of such circumstances, "on balance, the right to self-determination ordinarily outweighs any countervailing state interests, and competent persons generally are permitted to refuse medical treatment even at the risk of death."

Having recognized the right of patients to refuse medical treatment, the Court went on to explore the application of this right to incompetent nursing home patients generally and Claire Conroy in particular. Ms. Conroy was described as a formerly competent nursing home resident who was awake and conscious, who could interact with her environment to a limited extent, but whose mental and physical functioning severely and permanently were impaired and whose life expectancy, even with the treatment, was relatively short. Unlike Karen Quinlan whose cognitive abilities had been irreversibly lost (*In re Quinlan*, 70 N.J. 10, *cert.* den., 429 U.S. 922 (1976)), Ms. Conroy could interact with her environment to a limited extent, i.e. she could move her head, neck, hands, and arms, she could scratch herself, her eyes sometimes followed people in the room, and occasionally she smiled when her hair was combed or when she received a comforting rub. Nevertheless, she was unable to communicate her desires whether to continue or terminate the treatment which was sustaining her life: feeding through a nasogastric tube.

The Court emphasized the fact that she no longer could speak for herself yet this did not mean Ms. Conroy lacked a right to self-determination as to her medical treatment. In such circumstances, as with other individuals who cannot speak for themselves, e.g. the severely retarded, the newborn, and the comatose, a qualified third person may act for the incompetent, albeit with caution. The Court stated: "Since the condition of an incompetent patient makes it impossible to ascertain definitively his present desires, a third party acting on the patient's behalf often cannot say with confidence that his treatment decision for the patient will further, rather than frustrate, the patient's right to control his own body. Nevertheless, the goal of decision making for incompetent patients should be to determine and effectuate, insofar as possible, the decision that the patient would have made if competent. Ideally, both aspects of the patient's right to bodily integrity—the right to consent to medical intervention and the right to refuse it—should be respected." The question was how to determine what the patient's wishes were and how to implement them.

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*This item from the Department of Professional Liability Control, MSNJ, was prepared by James E. George, M.D., J.D., and A. Ronald Rouse, who are, respectively, Director of the Department and Director of Special Projects.

**The best illustration of when medical treatment may be required over the objections of a competent adult is the case of *Raleigh Fitkin-Paul Morgan Memorial Hospital v Anderson*, 42 N.J. 421, *cert.* den., 377 U.S. 985 (1964), in which the Supreme Court of New Jersey held that a woman in childbirth could be ordered to undergo blood transfusions over her religious objections when they were necessary to protect the health of the unborn child.

The Court identified three factual circumstances for approaching the problem: 1) when the patient previously had expressed clearly an intent as to life-sustaining intervention under the existing medical circumstances; 2) when there is some trustworthy evidence of the patient's intent; and 3) when there is no evidence of an intent previously expressed by the patient. Each circumstance calls for a different analysis.

The Court held that where the patient clearly had expressed a desire to either accept or refuse life-sustaining treatment such intent was controlling. The patient's intent could have been expressed in various ways, e.g. a "living will," a power of attorney, or clear oral statements to friends or family. Further, a patient's wishes could be deduced from religious beliefs and/or previous reaction to proposed medical treatment. But where it clearly can be ascertained that the patient would have chosen a course of treatment—including the withdrawal of life-sustaining treatment—the patient's wishes must be honored.

The Court further held that where the expression of intent is not clear, but there "is some trustworthy evidence that the patient would have refused the treatment," life-sustaining treatment may be withheld or withdrawn when "it is clear that the burdens of the patient's continued life with the treatment outweigh the benefits of that life for him." The Court explained: "By this we mean that the patient is suffering, and will continue to suffer throughout the expected duration of his life, unavoidable pain, and that the net burdens of his prolonged life (the pain and suffering of his life with the treatment less the amount and duration of pain that the patient would likely experience if the treatment were withdrawn) markedly outweigh any physical pleasure, emotional enjoyment, or intellectual satisfaction that the patient may still be able to derive from life. This limited-objective standard permits the termination of treatment for a patient who had not unequivocally expressed his desires before becoming incompetent, when it is clear that the treatment in question would merely prolong the patient's suffering."

The Court then turned to the situation where there was no evidence of the patient's wishes. Under these circumstances, life-sustaining treatment may be withdrawn or withheld where "the net burdens of the patient's life with the treatment . . . clearly and markedly outweigh the benefits that the patient derives from life."

The Court went on: "Further, the recurring, unavoidable, and severe pain of the patient's life with the treatment should be such that the effect of administering life-sustaining treatment would be inhumane. Subjective evidence that the patient would not have wanted the treatment is not necessary under this pure-objective standard. Nevertheless, even in the context of severe pain, life-sustaining treatment should not be withdrawn from an incompetent patient who had previously expressed a wish to be kept alive in spite of any pain that he might experience."

Finally, the Court turned to the issue of implementing these principles: that is, what procedures must be utilized before life-sustaining treatment may be withheld or withdrawn. The Court found the answer in existing statutes relating specifically to nursing homes and their patients. First is the 1976 statute regulating admissions to and care provided in nursing homes (N.J.S.A. 30:13-1 et seq.), particularly what has been referred to as the Nursing Home Patients' Bill of Rights (N.J.S.A. 30:13-5). Second is the statute establishing the State Office of the Ombudsman for the Institutionalized Elderly (N.J.S.A. 52:27G-1 et seq.), with the purpose of promoting, advocating, and ensuring adequate care in nursing homes. (N.J.S.A. 52:27G-6.)

Where a patient's guardian, or other interested party believes that withholding or withdrawing life-sustaining treatment would be appropriate, the Ombudsman is to be notified. The Ombudsman then must investigate the situation and report to the Commission of Human Services and any other governmental body regulating the home within 24 hours. (N.J.S.A. 52:27G-7.2a.) Evidence as to the patient's condition is to be furnished by the attending physician and nurses, and two other physicians, unaffiliated with the nursing home, must confirm the patient's medical condition and prognosis. If they concur with the attending physician, the guardian may withhold or withdraw life-sustaining medical treatment if he believes in good faith that the standards established by the Court have been met, and if the Ombudsman and the family concur.*

"The Court recognizes the right of self-determination."

However, the Court was careful to insert one further safeguard. Prior to instituting the above process, a judge must 1) make the "determination that the patient is incompetent to make the decision for himself" and 2) designate a guardian for the incompetent patient if one has not previously been appointed. Furthermore, even if the patient previously had been adjudicated incompetent and a guardian had been designated, the process cannot be initiated unless and until a judge determines by "clear and convincing" proof "that the patient does not have and will not regain the capability of making the decision for himself." Only then can the guardian authorize, with the necessary concurrence, withholding or withdrawal of life-sustaining treatment.

While the Court was careful to limit its decision to nursing home patients, the *Conroy* opinion contains within it far-reaching implications. First, it is plain that the Court's affirmation of the principle of self-determination has application to severely incompetent patients outside of nursing homes. Second, in the course of the opinion the Court expressed its views as to several other subsidiary issues of prime importance.

The Court rejected the idea that withdrawal or withholding of life-sustaining treatment was the legal equivalent of suicide. The Court stated: "Refusing medical intervention merely allows the disease to take its natural course; if death were eventually to occur,

*Concurrence of the family is not necessary, however, withdrawal or withholding of life-sustaining treatment is based solely on the principle that the patient's clearly expressed wishes were to do so under the circumstances.

it would be the result, primarily, of the underlying disease, and not the result of a self-inflicted injury."

"The difference," said the Court, "is between self-infliction or self-destruction and self-determination."

Further, the Court stated that there was no legal distinction between withholding and withdrawing treatment. Noting that labeling "conduct as active or passive is often an elusive notion," and "is particularly nebulous ... in the context of decisions whether to withhold or withdraw life-sustaining treatment." The Court insisted "that in making decisions whether to administer life-sustaining treatment to patients such as Claire Conroy, the primary focus should be the patient's desires and experience of pain and enjoyment—not the type of treatment involved."

Finally, the Court rejected the notion that the decision whether to employ life-sustaining treatment should be based on whether it is characterized as ordinary or extraordinary. As the Court stated: "Depending on the definitions applied, a particular treatment for a given patient may be considered both ordinary and extraordinary." In reality, the sophistication of life-sustaining mechanisms exists on a continuum which "constantly is shifting due to progress in medical care." And feeding, itself, as the level of technology and complexity increases, takes on the character of "medical procedures, with inherent risks and possible side effects." A nasogastric tube, for example, which was used to sustain Clare Conroy, "may lead to pneumonia, cause irritation and discomfort, and require arm restraints for an incompetent patient."

CONCLUSION

While limiting its decision to nursing home residents whose mental and physical functioning is severely and permanently impaired and whose life expectancy is relatively short, the Supreme Court of New Jersey has expanded upon its opinion in *Quinlan*, clearly recognizing a right of self-determination, which includes the right to refuse medical treatment even if the likely result is death. In addition, the Court set out judicial procedures for identifying appropriate circumstances for withholding or withdrawing life-sustaining medical treatment for nursing-home patients who are incompetent, whose mental and physical functioning is severely impaired and whose life expectancy, even with the treatment, is relatively short. **(Written by Burton L. Eichler, Esq. of Brach, Eichler, Rosenberg, Silver, Bernstein, Hammer & Gladstone, Counselors at Law.)**

PSYCHIATRIST SEES DANGER IN RAISING COVERAGE LIMITS AS INCIDENCE RISES

The rate at which psychiatrists insured by the American Psychiatric Association (APA) program are sued for malpractice has tripled in nine years, with an incidence today of 1 suit per year for each 22 of these physicians. In response to increasing numbers and severity of such suits, the APA-sponsored program recently increased maximum coverage limits from $1 million/$3 million to $5 million/$5 million.

Edward R. Sodaro, Jr., M.D., a psychiatrist from New York, recently expressed the view that increasing coverage limits merely encourages claimants to go for the maximum limits when suits are filed.

"It would be advisable to note the experience of similar increases by the Florida Medical Association-sponsored Reciprocal Insurance Fund in the years 1975 to the present," Dr. Sodaro said in the November 2 issue of *Psychiatric News*. "In this period many Florida medical doctors increased their per-incident coverage from $100,000 to $5 million, only to find that claims awarded by the court system always rose soon after to equal whatever new level of coverage physicians were purchasing." The Florida program now limits coverage to $1.5 million per incident "to discourage this escalating barratry," he said.

Dr. Sodaro advised lowering per-incident coverage for psychiatrists while keeping aggregate coverage three times larger, such as $1.5/$4.5 million or $2/$6 million.

The New York psychiatrist outlined some reasons why suits against such physicians are increasing. Some reasons stem from new information about past treatments; other arise from changing practice patterns. On the medical side, newly discovered long-term side effects of commonly used treatments, such as tardive dyskinesia, raise the potential for many more suits, Dr. Sodaro suggested. On the health care delivery side, psychiatric practice is becoming "a resource of last resort in referral networks or group practices involving nonphysician mental health workers" who refer patients on to psychiatrists only when they are in advanced, and thus potentially more litigation-prone conditions.

"We tend to use more higher-risk treatments, such as pharmacotherapies, as our lower-risk verbal psychotherapy caseload drops," Dr. Sodaro said. Furthermore, cost-cutting measures and institution of diagnosis-related group reimbursement sometimes give psychiatrists "less time and resources to provide optimal care for the extremely difficult Medicare population," increasing the likelihood of possible claims. *(Medical Liablity Monitor*, Vol. 9, No. 12, December 27, 1984)

FAILURE TO DIAGNOSE AND CONSULT RESULTS IN $1.273 MILLION VERDICT

The plaintiff, a 13-year-old boy, had been admitted to the hospital with a nondisplaced fracture of his left tibial plateau, suffered when he fell about 18 feet off a cliff. The plaintiff alleged that the general surgeon failed to diagnose and/or call in a proper consultant to diagnose a present partial popliteal arterial injury, which if left untreated could totally occlude the artery and cause death to the muscles of the leg. Further evidence from the plaintiff was that the consulting doctor, when called in, still could have saved most or all of the leg by performing arteriography and having revascularization accomplished. Arteriography never was performed, however, and the leg was amputated 11 days after the injury. In presenting damages, plaintiff ordered evidence of the cost of a myoelectronic leg which will be available by 1990. Plaintiff also used an economist and rehabilitation job placement expert to show five potential lost earning capacities. Reager *v* Anderson and Mellan Cir. Ct., Ohio Co. WV, 1984. *(Personal Injury Newsletter*, December 17, 1984, Mathew Bender & Co., Inc.)

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The Journal of the Medical Society of New Jersey won first place in the Medical Journalism Competition sponsored by Sandoz Pharmaceuticals.

The Journal of the Medical Society of New Jersey has been awarded First Prize in the category of state medical journals in the Tenth Annual Medical Journalism Competition by Sandoz Pharmaceuticals. These delightful words are from a letter by Craig D. Burrell, M.D., who went on to say, "The awards are for outstanding design and editorial qualities." To say that those of us who are involved in *The Journal* are proud is the understatement of the 1980s.

The kudos for this great honor, of course, must go to the following:

- Geraldine Hutner, managing editor, whose editorial skills, tireless efforts, and applied talents are responsible in large measure for our high-quality magazine.
- Paul J. Hirsch, M.D., and the Publication Committee for their guidance and confidence.
- The Editorial Board for ably performing the sensitive task of peer review of manuscripts and the many book reviewers.
- Dorothy Griffith, assistant managing editor, who combines a delightful personality with experience and talent and who is involved in journal production, subscription managment, and author relations.
- Karl Messerrly, our national pharmaceutical representative, who brings in the advertising revenue allowing production of a bigger and better product each month.
- Joe and Bettie Cookson, our state advertising managers, who obtain New Jersey advertising and are involved in budgeting and all production matters.
- Frank Cecala, the newest staff member, is our graphic artist who is responsible for the four-color covers, internal art work, and some graphic design.
- Vincent A. Maressa and Martin E. Johnson who produce the *Membership Newsletter*. Mr. Maressa, our executive director, also writes hospital governing board columns and serves as a manuscript reviewer and consultant in legal matters.
- James E. George, M.D., director of the Department of Professional Liability Control, writes hospital governing board columns, and prepares and supervises the Physician Legal Bulletin and the Professional Liability Commentary with A. Ronald Rouse.
- Stanley S. Bergen, M.D., Grace Gellman, and Robert S. Rigolosi, M.D., who prepare regular columns relating to UMDNJ, the MSNJ Auxiliary, and The Academy of Medicine of New Jersey, respectively.
- Bruce McL. Breckenridge, M.D., Ph.D., chairman of UMDNJ-Rutgers Medical School Department of Pharmacy, who is responsible for our pharmacology column.
- Herman Baker, Ph.D., professor of preventive medicine at UMDNJ-New Jersey Medical School, who supervises our nutrition column.
- R.H. Rapkin, M.D., medical director of Children's Hospital of New Jersey, for pediatric briefs.
- Judith K. Amorosa, M.D., department of radiology, UMDNJ—Rutgers Medical School, for the imaging column.
- Avrum L. Katcher, M.D., Guest Editor for our award-winning, *William Carlos Williams Commemorative Issue.*
- Morris H. Saffron, M.D., Archivist-Historian, MSNJ, who was Guest Editor, and Stuart Sammis, Archivist, UMDNJ, who was Project Director for the special issue, *300 Years of Medicine in New Jersey.*

We have tried to make *The Journal* worthy of America's first medical society. Our goals have been to meet the informational and educational needs of New Jersey physicians to the best of our abilities, to present pertinent and current facts about governmental, social, and economic issues, and to serve as the "house organ" of the Medical Society of New Jersey. We give our own editorial opinions, but make pages available for the opinions of others. We have tried to be fair and thorough, but recognize that there always is room for improvement.

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Alternative Delivery and Financing Systems

VINCENT A. MARESSA, J.D.

The HMO and PPO forms of health care have the potential to become competitive forces in the marketplace.

Health Maintenance Organizations (HMOs) have shown a dramatic market potential in the last several years. At the end of December 1983, there were 290 operating HMOs with an enrollment exceeding 13.6 million. The majority (190) were group or staff-types which provide care in the HMO's centralized facilities to prepaid members. The remaining 100 were Independent Practice Associations (IPAs) in which physicians practice in their private offices. The IPA gets a monthly capitation payment and pays the physician on a fee-for-service basis. IPAs enroll approximately 15 percent of total HMO members. Over 100 of all HMOs are in the following six states: California, New Jersey, Pennsylvania, Minnesota, Wisconsin, and Illinois.

There has been a 27 percent increase in the number of HMOs since 1978 and a 38 percent increase in membership. Dramatic growth is projected during the period from 1985 to 1990.

The number of HMOs operating on a multistate basis is 14. Their enrollment, however, is over 50 percent of all HMO enrollment. Clearly, large multistate HMOs are moving toward and have established a dominant market share position in New Jersey which is considered to be of prime HMO potential.

Another form of health plan is the Preferred Provider Organization (PPO). These plans have the potential to become a competitive force in the marketplace.

A PPO is a group of hospitals and physicians which contract with employers, insurance carriers, or other third parties. The PPO gives a discount to the purchasing entity in return for an enlarged patient base and quick reimbursement of bills. The Blue Shield participating physician agreement is in effect a form of PPO.

Both HMO and PPO development present opportunities and pitfalls for New Jersey hospitals and their medical staffs. In the HMO area, the AFL-CIO is moving to negotiate a proposal with all of the acute care hospitals, to turn each into an HMO. Thus far, the AFL-CIO has conducted its discussions with the New Jersey Hospital Association. Physicians have not been brought into these talks either through professional societies or through their hospital medical staffs. If labor and the New Jersey Hospital Association wish to develop a series of HMOs, they should bear in mind the necessity of involving hospital medical staffs and organized medical societies in their discussions. The acute care hospitals in this state cannot become effectively functioning HMOs without the assistance and participation of their medical staffs in particular, and the medical profession generally.

Likewise, the Prudential Insurance Company busily is organizing a statewide PPO. That plan has not been reviewed and endorsed by the Medical Society of New Jersey nor has the Society been requested to review it. Hospital governing boards and physicians would be well advised to review carefully any contracts proposed by Prudential or any other developing PPO, since there are serious contractual, antitrust, and professional liability issues presented in the PPO format.

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*The material in this column is coedited by Arthur Krosnick, M.D., Editor, *The Journal*, MSNJ; Vincent A. Maressa, J.D., Executive Director, MSNJ; and James E. George, M.D., J.D., Director of Professional Liability, MSNJ.

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Pilonidal Cyst: Wide Excision and Primary Closure with an Advancement Flap

Stanley Z. Trooskin, M.D., New Brunswick*

Wide excision of pilonidal cysts and primary closure with an advancement flap allowed for earlier healing and less frequent outpatient visits than treatment with wide excision and marsupialization. Although the hospital stay was prolonged by primary closure, patient inconvenience was reduced markedly.

Repeated episodes of infection and abscess formation are common complications of pilonidal cyst disease. There is no controversy regarding the treatment of the acute pilonidal abscess. These require incision and drainage. The treatment for the chronic pilonidal cyst is more controversial. The goal of treatment is to prevent the recurrence of infection while minimizing the patient's postoperative pain and disability. Treatment options run the gamut of conservative to radical measures. Some have advocated simple unroofing.[1,2] Others have advised wide local excision with various methods of treating the remaining defect.[3-9] The experience of one surgeon with two types of treatment, wide excision with marsupialization and wide excision with primary closure by an advancement flap, is presented.

MATERIALS AND METHODS

Sixteen patients underwent elective operation for pilonidal cyst disease at least one month following incision and drainage of an acute pilonidal abscess. A history of pilonidal abscess was required prior to definitive treatment.

Endotracheal intubation and general anesthesia were used with patients in the prone position on the operating table which was flexed at the patient's waist. The pilonidal cyst was widely excised, the area usually being 1.0 cm on either side of the sacrococcygeal raphe. The length was 6.0 cm and included the area 1.0 cm distal to the tip of the coccyx and the depth was to the posterior sacral fascia. All areas of sinus and cyst involvement thereby were excised. Hemostasis was obtained by electrocoagulating bleeding points. Four patients in this series underwent wide excision with marsupialization, which was carried out by suturing the skin edges to the sacral fascia with absorbable sutures. Twelve patients underwent wide excision and primary closure. The method of primary closure[6-10] involves elevation and advancement of gluteal flaps. At the time of outlining the area to be excised, the flaps also were marked as shown in Figure 1. The superior aspect of the incision was extended in a curvilinear fashion over one of the gluteal muscles. After excising the pilonidal cyst widely, the previously outlined flaps were mobilized below the gluteal fascia. The underlying muscle was exposed. The convex flap was mobilized farther than the concave flap to allow its advancement and closure of the defect without placing tension on the wound (Figure 2). A small closed suction drain was placed under the flaps and brought out through a separate stab wound. The gluteal fascia was approximated with interrupted absorbable sutures. The skin was closed with mattress sutures of 3-0 nylon (Figure 3).

Patients undergoing wide excision with marsupialization underwent the first sitz bath and dressing change the night after operation. After the sitz bath,

*Dr. Trooskin is Assistant Professor of Surgery, UMDNJ-Rutgers Medical School. Correspondence may be addressed to Dr. Trooskin, UMDNJ-Rutgers Medical School, Academic Health Science Center, CN 19, New Brunswick, NJ 08903.

the wound was packed loosely with gauze. Patients were instructed in a regimen of sitz baths and dressing changes to be done three times a day. The patients then were discharged.

Those patients undergoing wide excision and primary closure received one preoperative and three postoperative doses of parenteral antibiotics. The closed suction drain was removed when the drainage was less than 30 cc per day. Discharge instructions were to shower, if possible, after each bowel movement until the sutures were removed on the tenth postoperative day.

All patients were allowed to sit upright as soon as they could do so without pain. Outpatient visits were scheduled for approximately one week to ten days postoperation and then as needed for observation or wound care, i.e. debridement and treatment of hypertrophic granulation tissue. One visit at least two weeks after complete healing was standard practice.

The patient's age, weight, time interval between abscess drainage and definitive operation, length of hospital stay, number of postoperative outpatient visits, and the length of time after operation until wound healing were recorded for this study. Nonparametric statistical analysis was carried out using the Kruskal-Wallis test.

RESULTS

In the 16 patients undergoing wide excision, there were no recurrences of pilonidal cyst disease. The followup period ranged from one month to 3.5 years. The average age of patients undergoing wide excision with marsupialization was 28.5 years, while for those undergoing wide excision and primary closure, it was 21.3 years. Each group had a similar incidence of pilonidal abscess prior to wide excision and a similar interval between abscess drainage and definitive operation. The primary closure group had a significantly longer hospital stay (3.7 days) than the marsupialization group (1.5 days) ($P < 0.05$). The marsupialization group required more postoperative visits (13.3) compared to the primary closure group (2.8) ($P < .003$). The overall healing time ranged from one to eight months for the marsupialization group and 10 days to three weeks for the primary closure with the advancement flap. This difference was highly significant ($P < .005$).

TABLE

Comparison of Patient Groups

	Patients Undergoing Marsupialization	Patients Undergoing Primary Closure
Average age	28.5 years	21.3 years
Interval between attack and excision	2.6 months	1.8 months
No. of attacks before definitive operations	1.5	1.4
Length of hospitalization (days)	1.5	3.7
No. of postoperative visits	13.3	2.8
Time to complete healing	30-240 days	10 days to 3 weeks



Figure 1—The buttocks are distracted at the intergluteal cleft. After prepping and draping, the area to be excised and the flaps are outlined with a sterile marking pen.

These results are summarized in the Table. All four patients in the marsupialization group complied with sitz baths three times a day and subsequent dressing changes. In this group, debridement frequently was required as was treatment of hypertrophic granulation tissue with the application of silver nitrate.

The only wound complications in the primary closure group occurred at the lower pole of the incision. There was some mild maceration of the wound over the coccyx in two-thirds of the patients and 3 of the 12 patients had separation of the skin over the coccyx for a distance of 9.5 cm in length. The maceration and skin separation healed promptly after suture removal and daily showers. There were no wound infections in the primary closure group.

DISCUSSION

Various treatment modalities have been applied to pilonidal cyst disease. The goal of all of these has been to prevent recurrence of pilonidal abscesses. Definitive operation at the time of abscess drainage has been described.[1] Nonoperative treatment involving the application of phenol to the cyst cavity with curettage has also been advocated.[11] Others have advised simple unroofing and marsupialization or marsupialization and cryotherapy.[12] Excision has been the most commonly employed treatment. The management of the remaining defect has been controversial. Healing by secondary intention,[3] delayed primary closure, partial wound closure,[7] primary closure with bulky dressings and re-

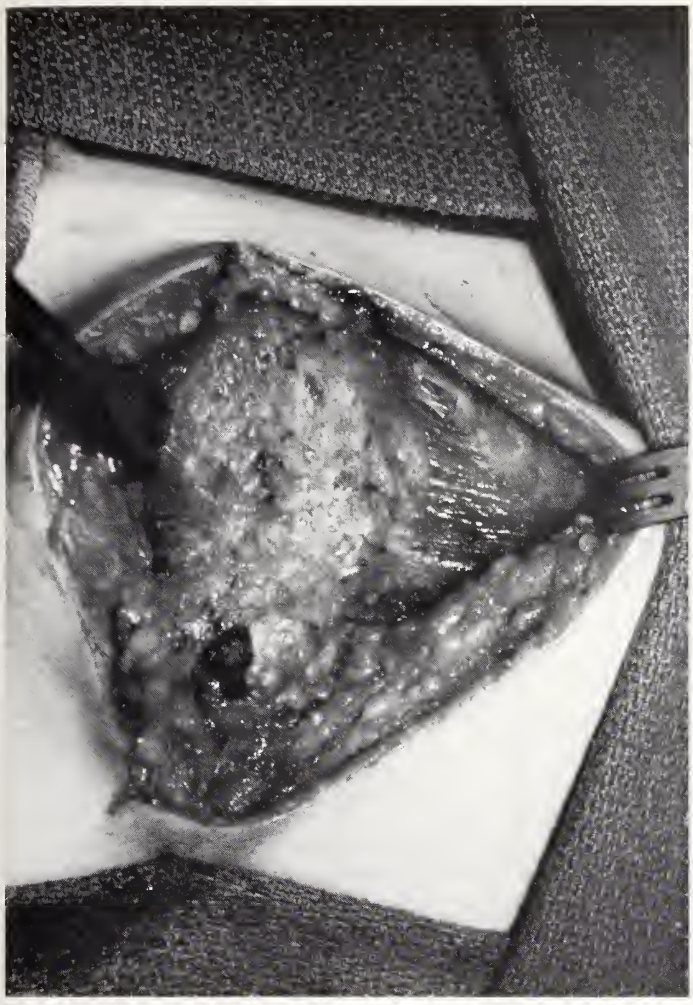


Figure 2—After the pilonidal cyst is widely excised, the previously outlined flaps are mobilized, thereby exposing the underlying gluteal muscles.

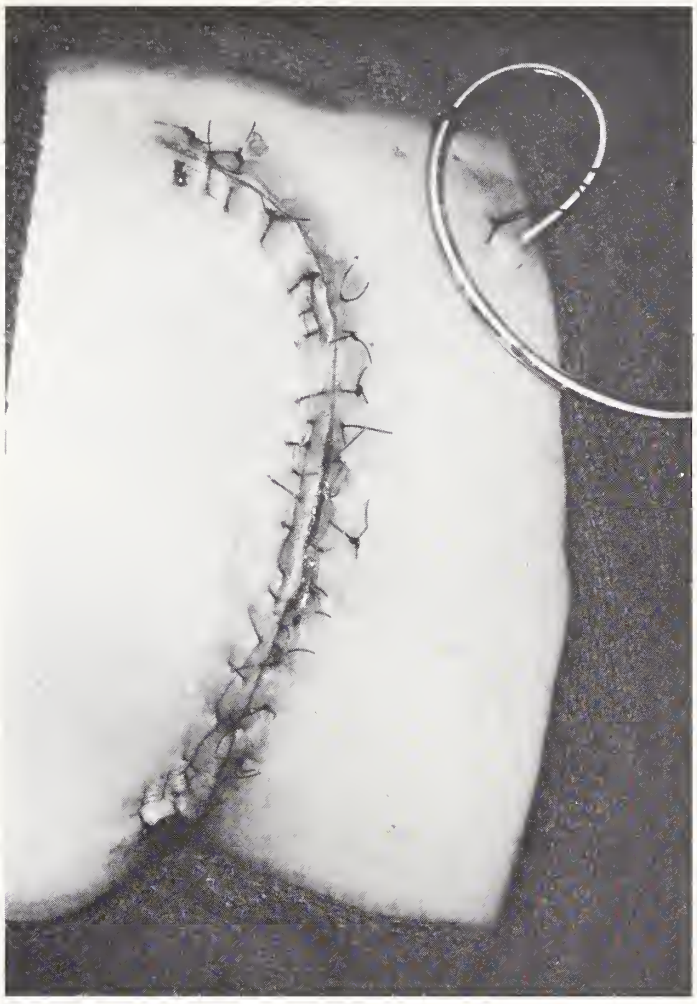


Figure 3—The wound is closed over a small suction drain brought out through a separate incision.

tention sutures,[4,9] as well as closures by Z-plasty,[8] rectangular flaps, and advancement flaps[5,6,10] have been reported. The recurrence rates reported for wide excision with healing by secondary intention and wide excision with primary closure have been similar and range from approximately 0 to 40 percent.[3-10]

It is not surprising that there is so much controversy concerning treatment of this disease when one realizes there is no universally accepted etiology for the formation of cysts in the median sacrococcygeal raphe. Older theories concerning the etiology of pilonidal cyst disease invoked a congenital origin.[13] Others insisted that pilonidal cysts were acquired lesions that occurred secondary to occupational hazards involving long hours of sitting or driving (jeep-drivers' disease).[14,15] It has been hypothesized that hairs became imbedded in the median sacrococcygeal raphe by puncture of the skin or by a local suction mechanism.[16] Bascom contended that the hair shaft is not an important etiologic factor but that hair follicles in the median raphe are responsible for the development of pilonidal sinuses and subsequent infection.[17]

Even the etiology of the recurrences of pilonidal cysts are debated in the surgical literature. Inadequate excision of the sinus tracts, postoperative wound infection, and inadequate removal of hair from the sacrococcygeal area have all been suggested as reasons for treatment failures.[3,11]

The treatment plan used for managing patients in this series was to employ wide excision to remove the cyst, all of its branches, and the imbedded hair or hair follicles. It became apparent after treating the first four patients that the healing time of the marsupialized wound was long (30 to 240 days) and involved unacceptable patient disability, in addition to requiring frequent attention of the physician (13 office visits per patient). This is consistent with previous reports[2,6] of healing times of one to three months for wounds left open after wide excision or treated by unroofing with marsupialization. Healing by secondary intention seems to be a treatment that is more inconvenient than the primary disease. Wide excision followed by primary closure utilizing a gluteal advancement flap allowed early healing. This type of closure is simple to carry out and, more importantly, allows a tension-free suture line. In all 12 patients, the wounds were healed by the third postoperation week. Most healed completely except for some minor maceration over the coccyx. Employing a horizontal, as opposed to vertical incision over the coccyx, has been advocated to avoid this problem.[10] Primary closure after wide excision involved a longer hospital stay (4 days) to allow for drain removal, but resulted in overall earlier healing and less patient discomfort.

Wide excision and primary closure with an advancement flap is simple, allows early complete healing, and an early return to a normal lifestyle. It frees the patient from the nearly incapacitating regimen of repeated sitz baths, dressing changes, and frequent outpatient visits.

SUMMARY

There are many methods of treating pilonidal cyst disease. Wide excision with marsupialization was compared to wide excision and primary closure with an advancement flap. Wide excision followed by marsupialization allowed for early hospital discharge, but was associated with long-term patient inconvenience because of slow healing rates. Primary closure with an advancement flap was simple to carry out after wide excision. This method resulted in longer hospital stays but more rapid healing rates and, therefore, less patient disability. There were no recurrences associated with wide excision.

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The mechanism of the antihypertensive effect of INDERAL has not been established. Among the factors that may be involved in contributing to the antihypertensive action are (1) decreased cardiac output, (2) inhibition of renin release by the kidneys, and (3) diminution of tonic sympathetic nerve outflow from vasomotor centers in the brain. Although total peripheral resistance may increase initially, it readjusts to or below the pretreatment level with chronic use. Effects on plasma volume appear to be minor and somewhat variable. INDERAL has been shown to cause a small increase in serum potassium concentration when used in the treatment of hypertensive patients.

In angina pectoris, propranolol generally reduces the oxygen requirement of the heart at any given level of effort by blocking the catecholamine-induced increases in the heart rate, systolic blood pressure, and the velocity and extent of myocardial contraction. Propranolol may increase oxygen requirements by increasing left ventricular fiber length, end diastolic pressure and systolic ejection period. The net physiologic effect of beta-adrenergic blockade is usually advantageous and is manifested during exercise by delayed onset of pain and increased work capacity.

In dosages greater than required for beta blockade, INDERAL also exerts a quinidine-like or anesthetic-like membrane action which affects the cardiac action potential. The significance of the membrane action in the treatment of arrhythmias is uncertain.

The mechanism of the antimigraine effect of propranolol has not been established. Beta-adrenergic receptors have been demonstrated in the pial vessels of the brain.

Beta receptor blockade can be useful in conditions in which, because of pathologic or functional changes, sympathetic activity is detrimental to the patient. But there are also situations in which sympathetic stimulation is vital. For example, in patients with severely damaged hearts, adequate ventricular function is maintained by virtue of sympathetic drive which should be preserved. In the presence of AV block, greater than first degree, beta blockade may prevent the necessary facilitating effect of sympathetic activity on conduction. Beta blockade results in bronchial constriction by interfering with adrenergic bronchodilator activity which should be preserved in patients subject to bronchospasm.

Propranolol is not significantly dialyzable.
INDICATIONS AND USAGE. Hypertension: INDERAL LA is indicated in the management of hypertension, it may be used alone or used in combination with other antihypertensive agents, particularly a thiazide diuretic. INDERAL LA is not indicated in the management of hypertensive emergencies.

Angina Pectoris Due to Coronary Atherosclerosis: INDERAL LA is indicated for the long-term management of patients with angina pectoris.

Migraine: INDERAL LA is indicated for the prophylaxis of common migraine headache. The efficacy of propranolol in the treatment of a migraine attack that has started has not been established and propranolol is not indicated for such use.

Hypertrophic Subaortic Stenosis: INDERAL LA is useful in the management of hypertrophic subaortic stenosis, especially for treatment of exertional or other stress-induced angina, palpitations, and syncope. INDERAL LA also improves exercise performance. The effectiveness of propranolol hydrochloride in this disease appears to be due to a reduction of the elevated outflow pressure gradient which is exacerbated by beta-receptor stimulation. Clinical improvement may be temporary.
CONTRAINDICATIONS. INDERAL is contraindicated in 1) cardiogenic shock, 2) sinus bradycardia and greater than first degree block; 3) bronchial asthma; 4) congestive heart failure (see WARNINGS) unless the failure is secondary to a tachyarrhythmia treatable with INDERAL.
WARNINGS. CARDIAC FAILURE: Sympathetic stimulation may be a vital component supporting circulatory function in patients with congestive heart failure, and its inhibition by beta blockade may precipitate more severe failure. Although beta blockers should be avoided in overt congestive heart failure, if necessary, they can be used with close follow-up in patients with a history of failure who are well compensated and are receiving digitalis and diuretics. Beta-adrenergic blocking agents do not abolish the inotropic action of digitalis on heart muscle.

IN PATIENTS WITHOUT A HISTORY OF HEART FAILURE, continued use of beta blockers can, in some cases, lead to cardiac failure. Therefore, at the first sign or symptom of heart failure, the patient should be digitalized and/or treated with diuretics, and the response observed closely, or INDERAL should be discontinued (gradually, if possible).

IN PATIENTS WITH ANGINA PECTORIS, there have been reports of exacerbation of angina and, in some cases, myocardial infarction, following abrupt discontinuance of INDERAL therapy. Therefore, when discontinuance of INDERAL is planned the dosage should be gradually reduced over at least a few weeks, and the patient should be cautioned against interruption or cessation of therapy without the physician's advice. If INDERAL therapy is interrupted and exacerbation of angina occurs, it usually is advisable to reinstitute INDERAL therapy and take other measures appropriate for the management of unstable angina pectoris. Since coronary artery disease may be unrecognized, it may be prudent to follow the above advice in patients considered at risk of having occult atherosclerotic heart disease who are given propranolol for other indications.

Nonallergic Bronchospasm (e.g., chronic bronchitis, emphysema)— PATIENTS WITH BRONCHOSPASTIC DISEASES SHOULD IN GENERAL NOT RECEIVE BETA BLOCKERS. INDERAL should be administered with caution since it may block bronchodilation produced by endogenous and exogenous catecholamine stimulation of beta receptors.

MAJOR SURGERY: The necessity or desirability of withdrawal of beta-blocking therapy prior to major surgery is controversial. It should be noted, however, that the impaired ability of the heart to respond to reflex adrenergic stimuli may augment the risks of general anesthesia and surgical procedures.

INDERAL (propranolol HCl), like other beta blockers, is a competitive inhibitor of beta-receptor agonists and its effects can be reversed by administration of such agents, e.g., dobutamine or isoproterenol. However, such patients may be subject to protracted severe hypotension. Difficulty in starting and maintaining the heartbeat has also been reported with beta blockers.

DIABETES AND HYPOGLYCEMIA: Beta-adrenergic blockade may prevent the appearance of certain premonitory signs and symptoms (pulse rate and pressure changes) of acute hypoglycemia in labile insulin-dependent diabetes. In these patients, it may be more difficult to adjust the dosage of insulin.

THYROTOXICOSIS: Beta blockade may mask certain clinical signs of hyperthyroidism. Therefore, abrupt withdrawal of propranolol may be followed by an exacerbation of symptoms of hyperthyroidism, including thyroid storm. Propranolol does not distort thyroid function tests.

IN PATIENTS WITH WOLFF-PARKINSON-WHITE SYNDROME, several cases have been reported in which, after propranolol, the tachycardia was replaced by a severe bradycardia requiring a demand pacemaker. In one case this resulted after an initial dose of 5 mg propranolol.
PRECAUTIONS. *General:* Propranolol should be used with caution in patients with impaired hepatic or renal function. INDERAL (propranolol HCl) is not indicated for the treatment of hypertensive emergencies.

Beta adrenoreceptor blockade can cause reduction of intraocular pressure. Patients should be told that INDERAL may interfere with the glaucoma screening test. Withdrawal may lead to a return of increased intraocular pressure.

Clinical Laboratory Tests: Elevated blood urea levels in patients with severe heart disease, elevated serum transaminase, alkaline phosphatase, lactate dehydrogenase.

DRUG INTERACTIONS: Patients receiving catecholamine-depleting drugs such as reserpine should be closely observed if INDERAL is administered. The added catecholamine-blocking action may produce an excessive reduction of resting sympathetic nervous activity which may result in hypotension, marked bradycardia, vertigo, syncopal attacks, or orthostatic hypotension.

Carcinogenesis, Mutagenesis, Impairment of Fertility: Long-term studies in animals have been conducted to evaluate toxic effects and carcinogenic potential. In 18-month studies in both rats and mice, employing doses up to 150 mg/kg/day, there was no evidence of significant drug-induced toxicity. There were no drug-related tumorigenic effects at any of the dosage levels. Reproductive studies in animals did not show any impairment of fertility that was attributable to the drug.

Pregnancy: Pregnancy Category C. INDERAL has been shown to be embryotoxic in animal studies at doses about 10 times greater than the maximum recommended human dose.

There are no adequate and well-controlled studies in pregnant women. INDERAL should be used during pregnancy only if the potential benefit justifies the potential risk to the fetus.

Nursing Mothers: INDERAL is excreted in human milk. Caution should be exercised when INDERAL is administered to a nursing woman.

Pediatric Use: Safety and effectiveness in children have not been established.
ADVERSE REACTIONS. Most adverse effects have been mild and transient and have rarely required the withdrawal of therapy.

Cardiovascular: bradycardia; congestive heart failure; intensification of AV block; hypotension; paresthesia of hands; thrombocytopenic purpura; arterial insufficiency, usually of the Raynaud type.

Central Nervous System: lightheadedness; mental depression manifested by insomnia, lassitude, weakness, fatigue; reversible mental depression progressing to catatonia; visual disturbances; hallucinations; an acute reversible syndrome characterized by disorientation for time and place, short-term memory loss, emotional lability, slightly clouded sensorium, and decreased performance on neuropsychometrics.

Gastrointestinal: nausea, vomiting, epigastric distress, abdominal cramping, diarrhea, constipation, mesenteric arterial thrombosis, ischemic colitis.

Allergic: pharyngitis and agranulocytosis, erythematous rash, fever combined with aching and sore throat, laryngospasm and respiratory distress.

Respiratory: bronchospasm.

Hematologic: agranulocytosis, nonthrombocytopenic purpura, thrombocytopenic purpura.

Auto-Immune: In extremely rare instances, systemic lupus erythematosus has been reported.

Miscellaneous: alopecia, LE-like reactions, psoriasiform rashes, dry eyes, male impotence, and Peyronie's disease have been reported rarely. Oculomucocutaneous reactions involving the skin, serous membranes and conjunctivae reported for a beta blocker (practolol) have not been associated with propranolol.
DOSAGE AND ADMINISTRATION. INDERAL LA provides propranolol hydrochloride in a sustained-release capsule for administration once daily. If patients are switched from INDERAL tablets to INDERAL LA capsules, care should be taken to assure that the desired therapeutic effect is maintained. INDERAL LA should not be considered a simple mg for mg substitute for INDERAL. INDERAL LA has different kinetics and produces lower blood levels. Retitration may be necessary especially to maintain effectiveness at the end of the 24-hour dosing interval.

HYPERTENSION—*Dosage must be individualized.* The usual initial dosage is 80 mg INDERAL LA once daily, whether used alone or added to a diuretic. The dosage may be increased to 120 mg once daily or higher until adequate blood pressure control is achieved. The usual maintenance dosage is 120 to 160 mg once daily. In some instances a dosage of 640 mg may be required. The time needed for full hypertensive response to a given dosage is variable and may range from a few days to several weeks.

ANGINA PECTORIS—*Dosage must be individualized.* Starting with 80 mg INDERAL LA once daily, dosage should be gradually increased at three to seven day intervals until optimum response is obtained. Although individual patients may respond at any dosage level, the average optimum dosage appears to be 160 mg once daily. In angina pectoris, the value and safety of dosage exceeding 320 mg per day have not been established.

If treatment is to be discontinued, reduce dosage gradually over a period of a few weeks (see WARNINGS).

MIGRAINE—*Dosage must be individualized.* The initial oral dose is 80 mg INDERAL LA once daily. The usual effective dose range is 160-240 mg once daily. The dosage may be increased gradually to achieve optimum migraine prophylaxis. If a satisfactory response is not obtained within four to six weeks after reaching the maximum dose, INDERAL LA therapy should be discontinued. It may be advisable to withdraw the drug gradually over a period of several weeks.

HYPERTROPHIC SUBAORTIC STENOSIS—80-160 mg INDERAL LA once daily.
PEDIATRIC DOSAGE—At this time the data on the use of the drug in this age group are too limited to permit adequate directions for use.

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TRENDS IN TEENAGE PREGNANCY

MOLLY S. CHATTERJEE, M.D., AND JOHN HEIM*

It has been reported that teenage mothers show an increased rate of prematurity, low birth weight, and perinatal death as compared to the general population.[1-4] This phenomenon has been documented so well that very low maternal age itself is becoming recognized as a high-risk factor in pregnancy. The causative factors contributing to perinatal morbidity and mortality in teenage pregnancy have not yet been completely elucidated, but it is reasonable to implicate disadvantaged socioeconomic standing, poor nutrition, poor hygienic habits, and inadequate education as contributing factors to this phenomenon. This study is not primarily concerned with determining the epidemiology of perinatal complications associated

*From the Department of Obstetrics and Gynecology, UMDNJ-New Jersey Medical School, Newark. Correspondence may be addressed to Dr. Chatterjee, Department of Obstetrics and Gynecology, UMDNJ-New Jersey Medical School, 100 Bergen Street, Newark, NJ 07103.

with teenage pregnancy, but rather to report on the trends observed in teenage obstetrical patients seen at University Hospital, Newark. The trends analyzed in this study include the incidence of spontaneous vaginal delivery (SVD) as compared to abnormal delivery (cesarean section), the incidence of prematurity (less than 37 weeks' gestation), rates of neonatal low birth weight, and other factors relating to the obstetrical course of teenage mothers.

MATERIALS AND METHODS

The purpose of this study is to report on the trends and to evaluate the outcome of teenage pregnancies at University Hospital, Newark, from July 1, 1981, to June 30, 1982. The hospital has a Maternal Infant Care Clinic where all teenage mothers (19 years and younger) are provided medical care. They receive special nutritional and sexual guidance, enroll in the MIC program, and visit the social worker. Very few of our teenage mothers are nonclinic patients.

To collect the needed information, maternity records of the labor and delivery section of University Hospital were reviewed. These records consisted of a series of five log books in which each delivery was documented. The information contained in these records consisted of patient's name, parity, and other information pertinent to the delivery. It should be noted that University Hospital is an inner-city medical center which draws the majority of its patient population from a socioeconomically depressed area. Most of the patients seen at this institution are economically indigent and this factor must be taken into account when arriving at conclusions. For this reason, it must be understood that this hospital serves a high-risk obstetric population mainly as a result of the socioeconomic status of its patients. Forty-one percent of all deliveries at this institution were the result of teenage pregnancies; correlating with Hutchins's study at an inner-city hospital in Philadelphia.[7] The national average is 19 percent.

RESULTS

In the study period from July 1, 1981, to June 30, 1982, there were a total of 2,280 deliveries at University Hospital. Of these, 932 deliveries (41 percent) were the result of teenage pregnancies where the mother was 19 years of age or younger. By age groups, 491 (53 percent) teenage mothers were between 18 and 19; 411 (44 percent) were between 15 and 17; and 30 (3 percent) were 14 years old or younger (Figure 1). In the 18- to 19-year-old age group, 231 (47 percent) mothers were multigravidas with the highest gravity being 7; of the mothers between the ages of 15 to 17, 128 (31 percent) were multigravidas with the highest gravity noted at 5. One mother in the youngest was a multigravida—gravida 2 (Figure 2).

Prematurity, defined as a gestational age of less than 37 weeks, occurred in a substantial percentage of the pregnancies studied. In the 18- to 19-year-old age group, 54 (11 percent) of the children born were premature. In the 15- to 17-year-old age group, 54 pregnancies (13 percent) resulted in premature babies. In the 14-year-old and below age group, 6 births (20 percent) resulted in premature infants (Figure 3). National average for prematurity is 8 percent.

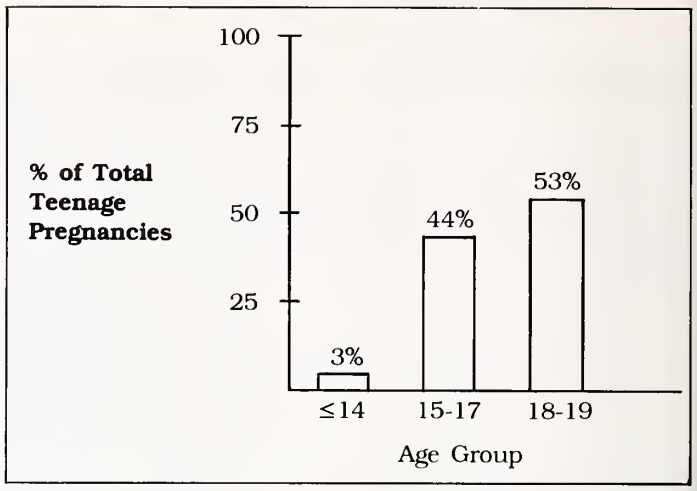


Figure 1—Percentage of teenage pregnancy in each age group.

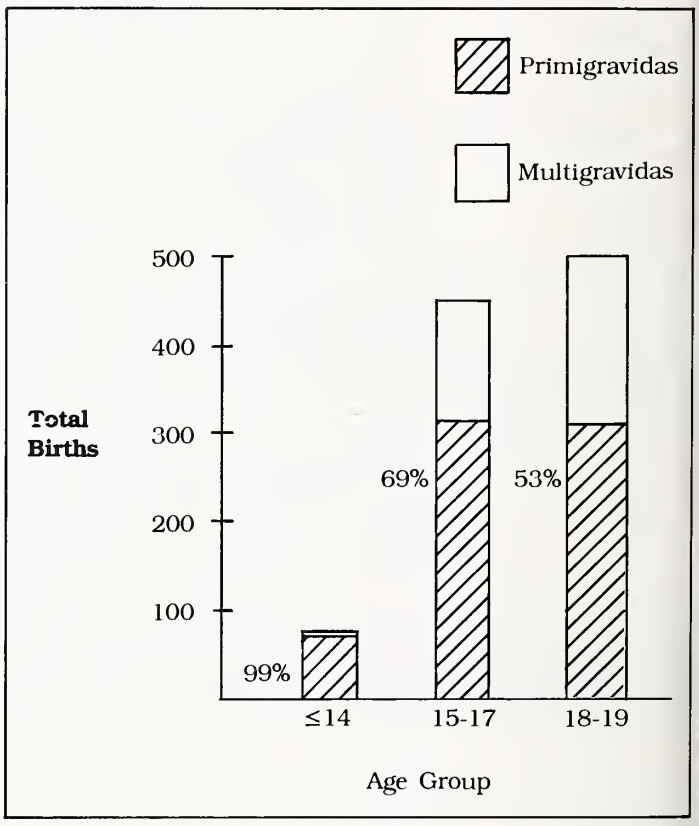


Figure 2—Parity of age groups.

Abdominal delivery or cesarean section in the 18- to 19-year old age group was necessary in 73 instances (15 percent); of the 73 cesarean sections, 17 were repeat sections. In the 15- to 17-year-old category, 52 (13 percent) cesarean sections were required. Repeat cesarean sections accounted for 2 of the 52 aforementioned cesarean sections. In the 14-year-old and below age group, 3 mothers (10 percent) were delivered by cesarean section with no repeat sections being required (Figure 4). The indications for cesarean section were not different from those of the general population or in other hospitals.

Trends in birth weights for the different age groups also were noted. Two percent of the children delivered by the 18- to 19-year-old age group weighed less than 999 grams; 13 percent weighed between 1,000 and 2,499 grams; and the remaining children weighed

2,500 grams and above. The 15- to 17-year-old age group showed essentially the same pattern with respect to birth weight where 2 percent of the infants born weighed less than 999 grams; 12 percent weighed between 1,000 and 2,499 grams; and the remaining children weighed 2,500 grams or more. The 14-year-old and below age group showed a different trend with respect to birth weight. In this age category, again, the children weighing below 999 grams represented a small percentage (only 3 percent). The major difference was seen in the 1,000 to 2,499 gram range which contained 20 percent of the infants born to mothers 14 and younger. It is a well documented fact that with very low maternal age, birth weights also tend to be lower than the general population.[2-4] However, since there were relatively few mothers 14 and younger, conclusions drawn from this age category must be interpreted with caution.

Apgar scores routinely are given to neonates directly after birth and again after ten minutes. Apgar scores range from 0 to 10 and take into account the infant's color, heart rate, respiration, muscle tone, and response to a catheter placed in the oropharynx. A score of 7 and above indicates a baby in good condition. If a neonate receives an Apgar score of 6 or lower, this usually indicates a certain degree of neonatal distress. For this reason, the Apgar scores obtained for the 932 teenage deliveries were assigned into one of two groups: those receiving a first Apgar score of 7 and above and those receiving scores of 6 or less (Figure 5). In the 18- to 19-year-old age bracket, 46 (9 percent) infants delivered received a first Apgar of 6 and below. In the 15- to 17-year-old age group, 43 children (11 percent) received an Apgar of 6 and below. Finally, the 14-year-old and below age category showed a dramatic increase in the percentage of neonates receiving poor Apgar scores. A remarkable 7 out of 30 children (23 percent) born in this category received a first Apgar of 6 or lower. But again, since this category had so few members, conclusions drawn from it must be reviewed with skepticism (Figure 6).

The incidence of toxemia was about 6 percent and intra- and postpartum febrile morbidity was about 30 percent, which is comparable to the general population.

DISCUSSION

Forty-one percent of the obstetrical patients seen at University Hospital during the course of this study were teenagers. This is more than twice the national average in which births to teenage mothers accounted for 19 percent of all the births in the United States.[7]

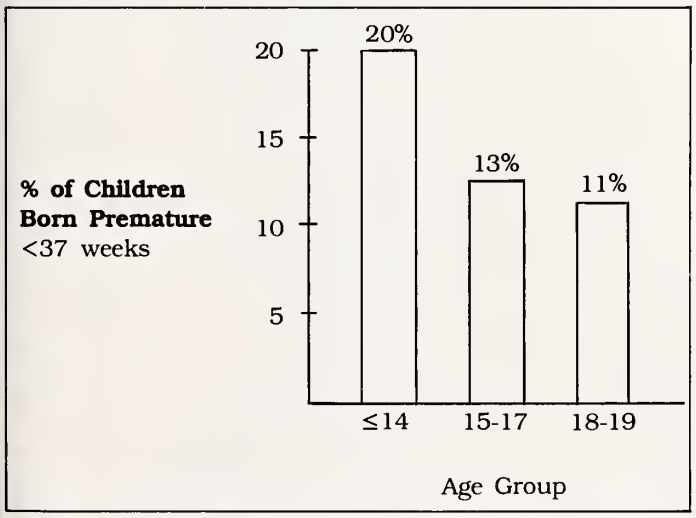


Figure 3—Percentage of prematurity in each age group.

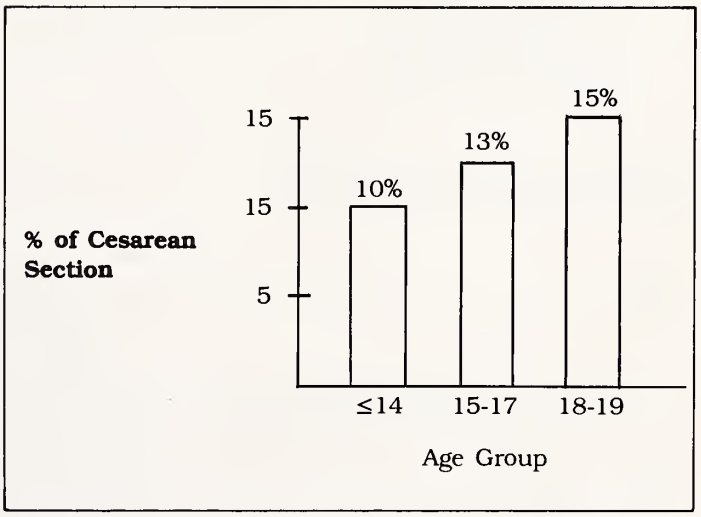


Figure 4—Percentage of cesarean section in each age group.

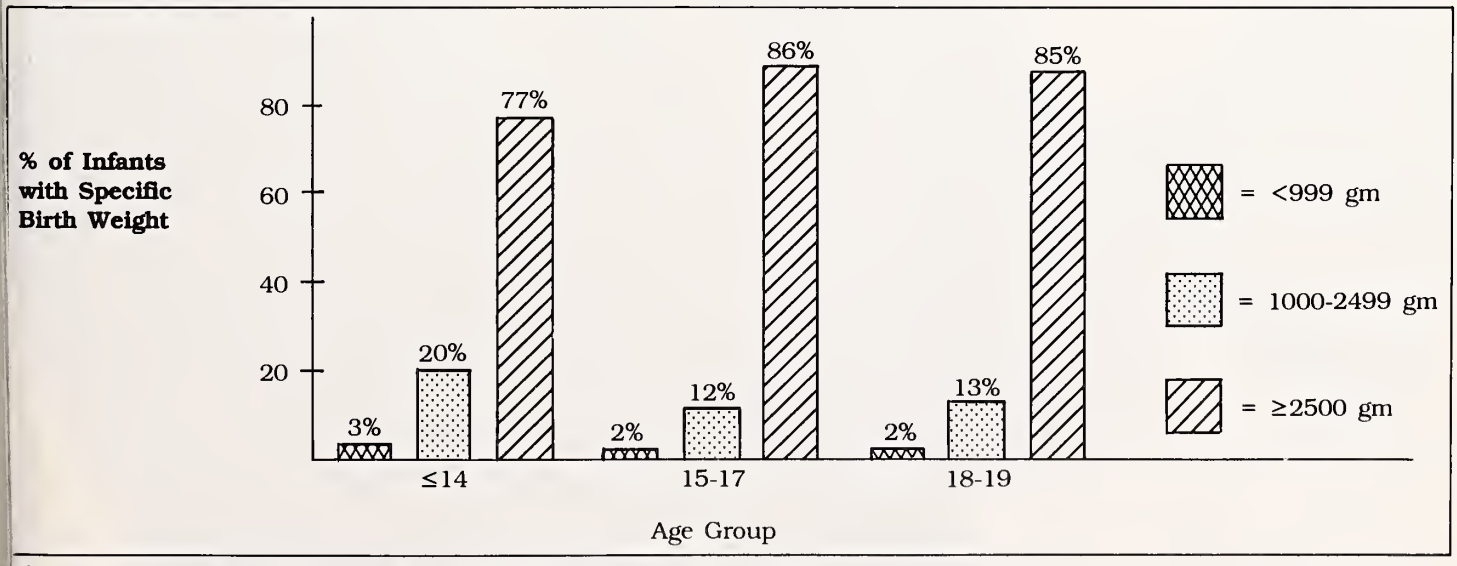


Figure 5—Percentage of infants born with various birth weights.

Since University Hospital serves a population which is socioeconomically depressed and educationally unsophisticated, such high rates of teenage pregnancy can be expected. In this study, besides finding a very high rate of teenage pregnancy, we also noted certain trends associated with these pregnancies. We found that, in our teenage population, the incidence of prematurity or delivery of a fetus of less than 37 weeks' gestation increased consistently with decreased maternal age. A trend also was noted in this study in that the incidence of low birth weight and poor Apgar scores tended to increase as maternal age decreased. These results correlated well with three separate studies conducted by Dott, Hutchins, and Claman, respectively.[2,4,7] Interestingly enough, each of these studies was conducted at an inner-city medical center serving a so-called "high-risk obstetric population."[7]

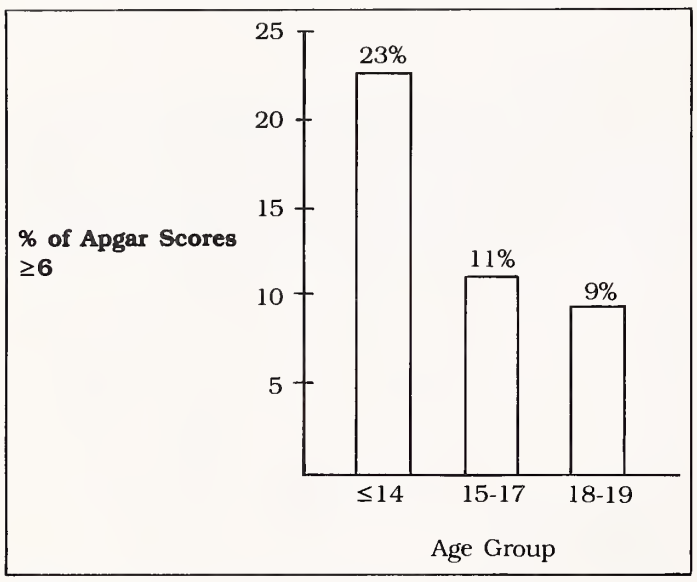


Figure 6—Apgar scores of infants born to each age group.

In any age group, certain factors are associated with a poor outcome in pregnancy. As an example, poverty with its concatenate poor nutrition and inadequate care is just such a factor. Therefore, by basing a study on an economically and educationally disadvantaged population, we selected out those factors which predispose a pregnancy to a poor outcome. This being true, what we actually were studying were the effects of poverty on the outcome of pregnancy and, perhaps only secondarily, were we investigating any risk inherent to very young maternal age. As a result of their poverty and lacking education, it was shown in Dott's study that teenage gravidas receive less prenatal care than their older counterparts, having fewer clinic visits and starting later on in their pregnancies.[4] This partially may explain the pattern of prematurity in offspring of very young mothers. As a general rule, prenatal care in the teenager usually is less than that in the adult mother. This may arise from the fact that young, unmarried pregnant girls are reluctant to accept their pregnancy and therefore are indifferent to antepartum care.[3,5]

SUMMARY

This study confirms the findings of others in that offspring of teenage mothers are at a greater risk as maternal age decreases.[6-8] Yet, it also must be kept in mind that the outcome of teenage pregnancy reflects the characteristics of the population from which it is derived.

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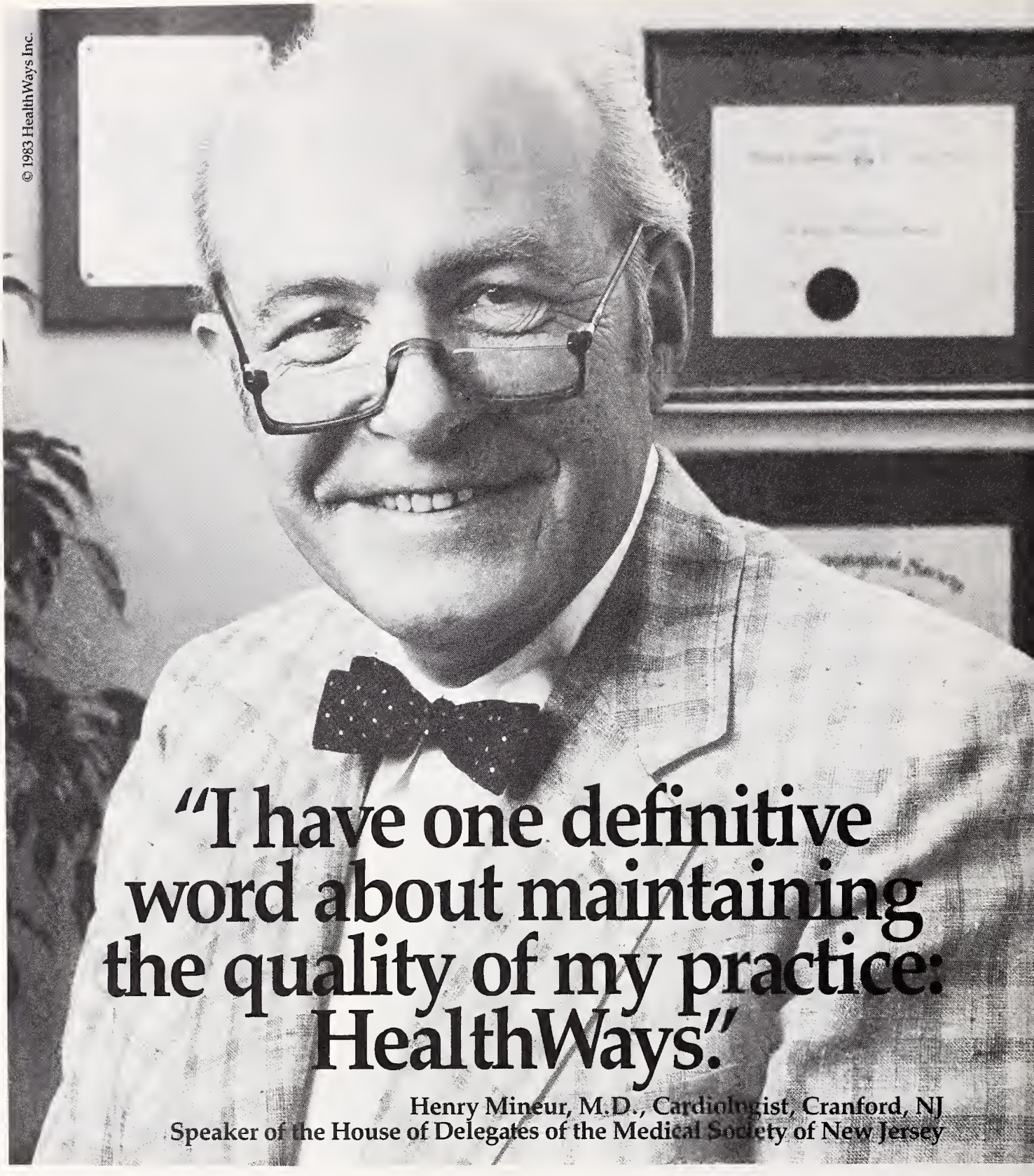
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Mucinous Appendiceal Tumors: Clinical Review

James B. Stephenson, M.D., and Donald K. Brief, M.D., Newark*

Mucinous appendiceal tumors include benign retention cysts and cystadenomas, cyst adenocarcinomas, and pseudomyxoma peritonei. Patients may have chronic right lower quadrant pain, acute appendicitis, abdominal mass, or no symptoms. Four cases of mucinous appendiceal tumors are reported.

The pathologic recognition of mucinous appendiceal tumor was made by Rokitansky in 1842.[32] Diffuse mucinous involvement of the peritoneal cavity first was described in 1884 by Werth, who named this condition "pseudomyxoma peritonei."[32] Berger is credited with the first authenticated case of adenocarcinoma of the appendix in 1882.[27] Fraenkel, in 1901, was the first to report the association between a ruptured mucinous appendiceal tumor and pseudomyxoma peritonei.[32]

Many reports have appeared discussing these three associated disorders. This article will review current thinking as to the etiology, classification, diagnosis, and treatment of mucinous appendiceal tumors and report four additional cases.

Between 1972 and 1981, 871 appendectomies were performed at Newark Beth Israel Medical Center. Four cases of mucinous appendiceal tumors were diagnosed as a result of these explorations.

CASE REPORT 1

A 58-year-old female disclosed a four-week history of painless hematochezia. She had a previous history of fever, anemia, and leukopenia with a negative gastrointestinal evaluation in 1977 and normal follow-up barium enema in July 1980. Hypertensive cardiovascular disease was controlled with diuretic therapy. Physical examination and vital signs were within normal limits except for a biopsy scar of the right breast. Blood tests, ECG, and chest x-ray were noncontributory. Barium enema and upper gastrointestinal series with small bowel follow-through confirmed the presence of filling defect of the proximal ascending colon with associated intussusception. Liver and spleen scans were normal. CEA (2.4 units) and 5HIAA (8.7 μg percent) were both normal. Colonoscopy was performed and biopsy of a submucosal cecal mass revealed normal colonic mucosa. Preoperative bowel prep produced colicky right lower quadrant pain.

Laparotomy revealed a 7 cm mucocele of the appendix, with intussusception of the cecum which was resected. It was a mucocele of the appendix. The postoperative course was uneventful.

CASE REPORT 2

A 50-year-old female was hospitalized with right lower quadrant pain and heavy irregular menses for three months; the symptoms were progressive. Vital signs on admission were normal. Physical examination was negative except for an enlarged smooth uterus. Hemoglobin was 10.6 gm percent, but the rest

*From the Department of Surgery, UMDNJ, and Newark Beth Israel Medical Center. Correspondence may be addressed to Dr. Brief, Newark Beth Israel Medical Center, 201 Lyons Avenue, Newark, NJ 07112.

of the blood tests, ECG, and chest x-ray were noncontributory. A total abdominal hysterectomy and salpingo-oophorectomy were performed for fibromyomata of the uterus. A 6.5 by 2 cm appendiceal mass, distended with clear mucoid material, was removed. Pathology report confirmed fibromyomata of uterus and mucocele of appendix. Both ovaries were normal. Postoperative course was uneventful.

CASE REPORT 3

An 81-year-old male had a 2-year history of progressive constipation without abdominal pain, rectal bleeding, or weight loss. Initial gastrointestinal studies at onset of symptoms were negative. Past medical history was significant only for prostatectomy for benign prostatic hypertrophy 12 years earlier. Vital signs on admission were normal. Physical examination showed a hypogastric midline scar on the abdomen but was otherwise within normal limits. Blood studies, ECG, and chest x-ray were noncontributory. Barium enema revealed a cecal tumor. At surgery, a 4.5 by 1.5 cm appendiceal mass was found and appendectomy was performed. The mass was filled with a yellow mucoid material with a point of rupture with exuding mucus. The postoperative course was uneventful; the patient was discharged on the eighth postoperative day. He expired 9 years later from unrelated chest trauma, with no evidence of recurrent tumor.

CASE REPORT 4

A 70-year-old male developed sudden onset of epigastric pain; he had a previous history of duodenal ulcer surgery. There also was a history of three months' constipation and ten-pound weight loss. Vital signs were normal on admission. Physical examination found bilateral chest bronchi and a distended rigid quiet abdomen with diffuse tenderness and rebound. Chest x-ray showed free air under diaphragm. Except for a hemoglobin of 8.3 gm percent, blood studies and ECG were noncontributory. At laparotomy, a perforated gastric carcinoma was found and plicated. The appendix was swollen, bulbous, and fluctant at the tip; it measured 6 by 10 cm with a constricted base. Pathology report confirmed mucocele. The postoperative course was complicated by a subendocardial infarction resulting in death on the tenth postoperative day.

ETIOLOGY AND PATHOGENESIS

The incidence of mucinous tumors, pseudomyxoma peritonei, and primary adenocarcinoma of the appendix is 0.25, 0.031, and 0.08 percent of appendectomies, respectively. It was 0.57 percent in this series. Ten percent of mucinous appendiceal tumors are malignant.[7]

Four mechanisms have been described by Wolff and Ahmed for the production of a mucin-filled ectatic appendix.[33] The first is simple obstruction of the lumen, frequently with secondary infection, known as "retention cyst of the appendix." Most obstructions are due to chronic inflammation with cicatrical contraction and continued mucus secretion distally in a viable appendix. Obstruction by a cecal carcinoma, carcinoid, polyp, and endometriosis has been reported.[19]

The second mechanism occurs when the appendiceal mucosa becomes hyperplastic with hypersecretion of mucus, similar to colonic hyperplastic polyps.[17]

The third mechanism is via focal or diffuse conversion of the mucosa into neoplastic epithelium without infiltration of the appendiceal wall.[23] These cystadenomas are characterized by tall columnar cells with hyperchromatic basally placed elongated nuclei, and papillary fronds projecting into the lumen. When this papillary architecture is lacking, its absence can be attributed to the luminal dilatation and subsequent compression of the lining mucosa.

The fourth mechanism is mucus production from an invasive cystadenocarcinoma of the appendix. Rupture of an appendix containing this tumor produces pseudomyxoma peritonei.[11] Cellular elements from the cystadenocarcinoma implant on the peritoneum and continue to secrete mucus, thus filling the peritoneal cavity. The appearance of such an abdomen can resemble that seen in cases of unresectable carcinomatosis.[4] This progression has been reproduced experimentally in lavaged ligated viable rabbit appendices by several investigators.[6,15,29] By using a Seitz filter, they confirmed the cellular nature of this disorder via transplantability of unfiltered peritoneal mucus.[18] In the past, ruptured cystadenomas and retention cysts were confused with pseudomyxoma, but the disappearance of peritoneal mucin after appendectomy differentiates this benign spillage from the malignant metastatic hypersecretion of pseudomyxoma peritonei.[34] Ultrastructural finding of intracytoplasmic canaliculi also supports the contention that pseudomyxoma peritonei represents a malignant lesion.[9]

CLINICAL FEATURES AND DIAGNOSIS

Benign mucinous appendiceal tumors usually are an incidental finding during abdominal exploration for another reason. When symptomatic, 30 percent have a history of chronic right lower quadrant pain.[25] Twenty-five percent have clinical evidence of acute appendicitis. A symptomatic or asymptomatic abdominal mass was found on physical examination or barium enema in 25 percent. Malignant appendiceal tumors most commonly appear as acute appendicitis and appendiceal abscess.[8] Rectal bleeding was the primary complaint in many patients. Right lower quadrant colocutaneous fistula has been associated with this malignancy. Fifty percent of patients with pseudomyxoma peritonei seek medical treatment for abdominal pain; 84 percent have a palpable mass and 13 percent are asymptomatic.[11]

Classical roentgen criteria for the diagnosis of appendiceal mucinous tumor are: 1) sharply circumscribed, globular, or reniform soft tissue mass which is mobile but attached to the cecum; 2) medial displacement of the cecum by the mass; and 3) calcium deposits in the wall or substance of the mass and failure of the appendix to fill with contrast.[10]

With the advent of ultrasonography, the cystic nature of the mass, along with any exuberant mucosal proliferation, can be identified easily.[20] Computed tomography can measure tissue density. CT scanning can be diagnostic for a mucinous appendiceal tumor

TABLE

Summary of 53 Cases of Malignant Mucinous Appendiceal Tumors Treated by Appendectomy or Right Hemicolectomy

	Patients	Mean-Age	Sex M	Sex F	Result Cure	Result Death or Recurrence
Appendectomy*	25	57 yrs	18	7	11	14
Right Hemicolectomy*	28	55 yrs	13	15	19	9

*References: 1,2,8,13,16,17,22,23,24,26,30,31,33.

by finding a mass compressing or adjacent to a contrast-filled cecum with an attenuation coefficient of a fluid-filled cyst.[12]

TREATMENT AND PROGNOSIS

Appendectomy is the appropriate treatment for all benign mucinous cystadenomas, polyps, and retention cysts of the appendix.[3] A partial resection of the cecum may be necessary if the base of the appendix is involved.[25] Appendectomy also is adequate for ruptured benign mucinous tumors with localized mucin extravasation. A search always should be made for tumors of the ovary, gastrointestinal tract, gallbladder, and obliterated omphalomesenteric duct, since concomitant mucinous and epithelial tumors have been reported.[19,25]

For malignant mucinous tumors, appendectomy and primary or secondary right hemicolectomy is the treatment of choice.[19] These tumors are slow growing, with local invasion and peritoneal spread the rule, as opposed to lymphatic and extraperitoneal metastases. Regional lymph node metastases have been reported by several authors.[14,28,31]

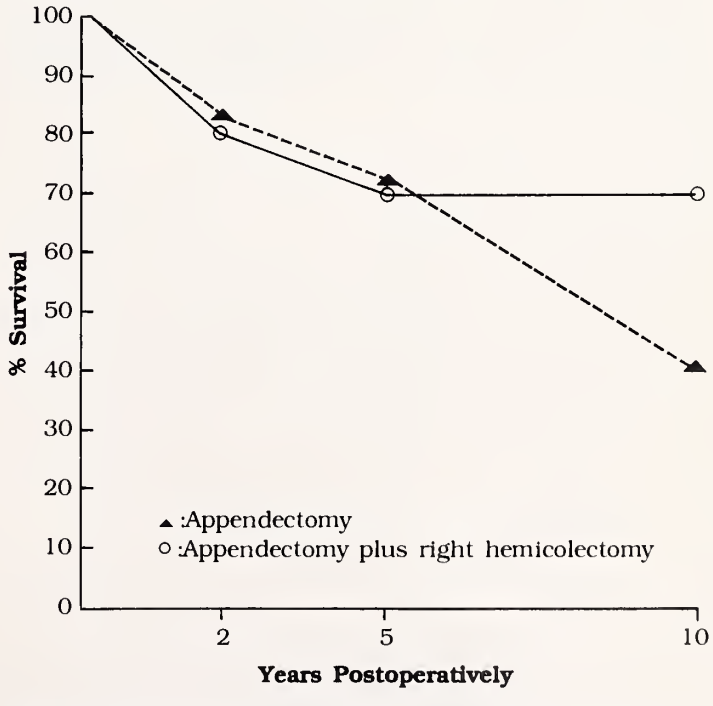
Fifty-three cases of malignant mucinous appendiceal tumors treated by appendectomy or right hemicolectomy were reviewed (Table).[1,2,8,13,16,17,22-24,26,28,30,31,33] There were 25 patients treated with appendectomy and 28 patients treated with appendectomy plus primary or secondary right hemicolectomy. The mean age of the appendectomy group was 57 years compared to 55 years for the hemicolectomy group. Using life-table analysis, we reviewed 2-, 4- and 10-year survival rates in these patients. The graph in the Figure demonstrates 2-year and 5-year survival rates. At 10 years, however, the right hemicolectomy group survival rate was 65 percent compared to 37 percent of the appendectomy-treated group. Recurrences developed 5 to 10 years postoperatively in the appendectomy group, while one recurrence occurred in the hemicolectomy group surviving beyond 3 years. Secondary right colectomy has an improved prognosis if performed within two to three weeks of appendectomy.[8]

Pseudomyxoma peritonei presents the greatest treatment challenge. Multiple operative procedures for intestinal obstruction and removal of recurrent myxomatous ascites combined with intraperitoneal alkylating agents showed the best survival.[21] Current recommendations for treatment include appendectomy, bilateral oophorectomy, omentectomy, and evacuation of mucin using dry laparotomy packs followed by copious saline irrigation.[5] Melphalan, fluorouracil, and thio-tepa are effective in controlling residual disease.[11,21] Fernandez and Daly reported improved five-year survival with whole abdominal or strip abdominal radiotherapy which can be used as adjuvant treatment postoperatively.[11]

SUMMARY

Four cases of mucinous appendiceal tumors are described: two cases had symptoms referable to the right lower quadrant, one case was found incidently during laparotomy for other disease, and the other case was found in association with another gastrointestinal tumor. The four mechanisms believed to be responsible for production of these tumors are: 1) lumen obstruction in a viable appendix; 2) hyperplastic mucus-secreting appendiceal mucosa; 3) neoplastic conversion of mucosa without infiltration; and 4) invasive cystadenocarcinoma.

These tumors usually are asymptomatic. When symptomatic, chronic right lower quadrant pain, an abdominal mass, rectal bleeding, or clinical features of acute appendicitis or appendiceal abscess were the initial complaint. Barium enema findings can suggest these tumors, but ultrasonography and computed



Figure—Survival after surgery for malignant mucinous appendiceal tumors.

tomography may be diagnostic by defining a cystic mass compressing or adjacent to the cecum.

Benign retention cysts and cystadenomas are cured by appendectomy, while primary or secondary right hemicolectomy is the treatment of choice for malignant lesions. The combination of appendectomy, bilateral oophorectomy, evacuation of mucin, and adjuvant chemotherapy with alkylating agents and radiotherapy improves survival in pseudomyxoma peritonei.

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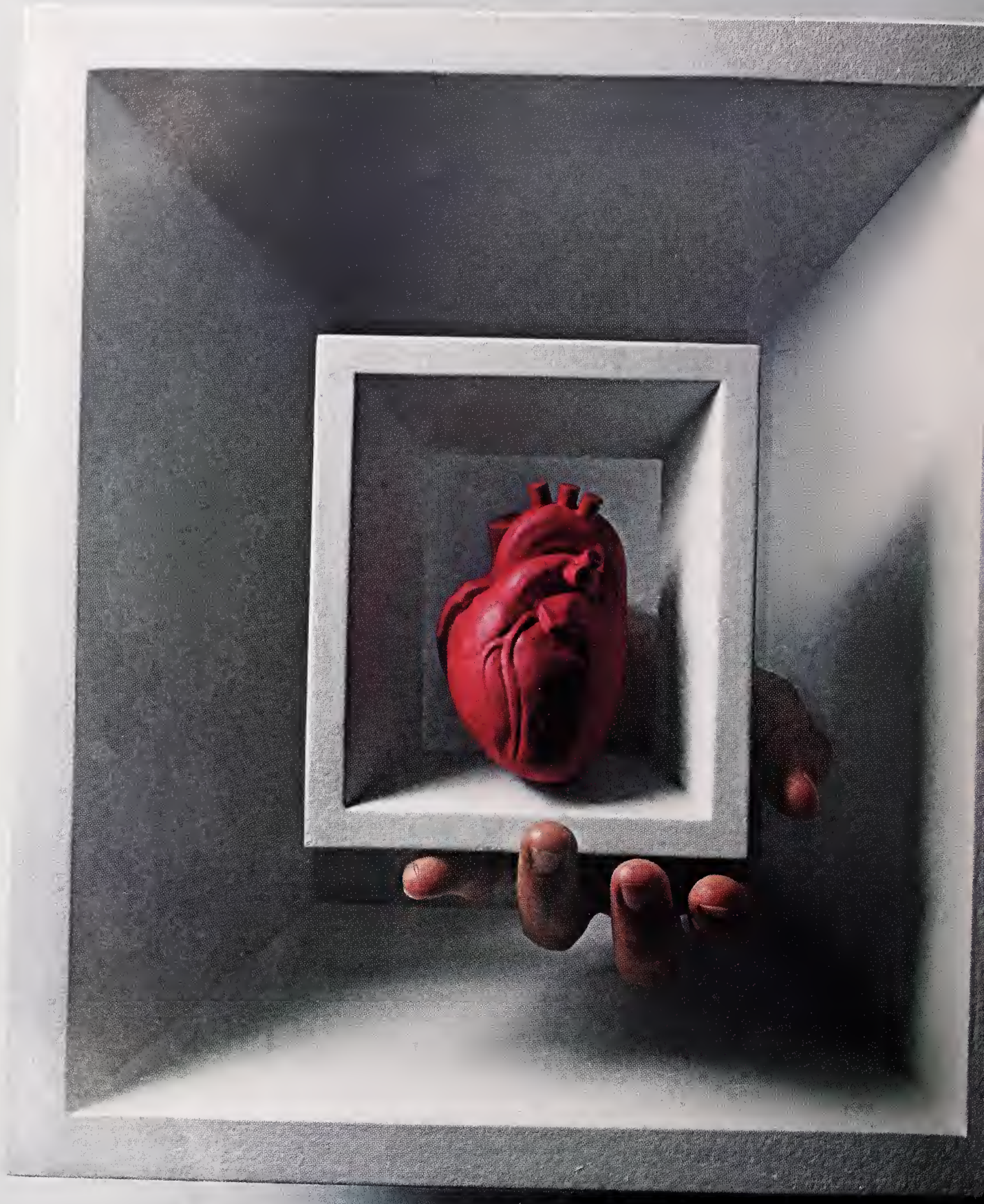
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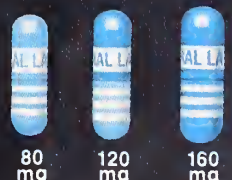
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Dosage may be increased to 160 mg once daily, as needed, to achieve optimal control. INDERAL LA should not be used in congestive heart failure, sinus bradycardia, cardiogenic shock, heart block greater than first degree, and bronchial asthma. Please see next page for further details and brief summary of prescribing information.

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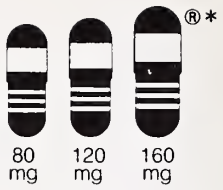


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BRIEF SUMMARY *(FOR FULL PRESCRIBING INFORMATION, SEE PACKAGE CIRCULAR.)*
INDERAL® LA brand of propranolol hydrochloride **(Long Acting Capsules)**
DESCRIPTION. Inderal LA is formulated to provide a sustained release of propranolol hydrochloride. Inderal LA is available as 80 mg, 120 mg, and 160 mg capsules.
CLINICAL PHARMACOLOGY. INDERAL is a nonselective beta-adrenergic receptor blocking agent possessing no other autonomic nervous system activity. It specifically competes with beta-adrenergic receptor stimulating agents for available receptor sites. When access to beta-receptor sites is blocked by INDERAL, the chronotropic, inotropic, and vasodilator responses to beta-adrenergic stimulation are decreased proportionately.

INDERAL LA Capsules (80, 120, and 160 mg) release propranolol HCl at a controlled and predictable rate. Peak blood levels following dosing with INDERAL LA occur at about 6 hours and the apparent plasma half-life is about 10 hours. When measured at steady state over a 24-hour period the areas under the propranolol plasma concentration-time curve (AUCs) for the capsules are approximately 60% to 65% of the AUCs for a comparable divided daily dose of INDERAL tablets. The lower AUCs for the capsules are due to greater hepatic metabolism of propranolol, resulting from the slower rate of absorption of propranolol. Over a twenty-four (24) hour period, blood levels are fairly constant for about twelve (12) hours then decline exponentially.

INDERAL LA should not be considered a simple mg for mg substitute for conventional propranolol and the blood levels achieved do not match (are lower than) those of two to four times daily dosing with the same dose. When changing to INDERAL LA from conventional propranolol, a possible need for retitration upwards should be considered especially to maintain effectiveness at the end of the dosing interval. In most clinical settings, however, such as hypertension or angina where there is little correlation between plasma levels and clinical effect, INDERAL LA has been therapeutically equivalent to the same mg dose of conventional INDERAL as assessed by 24-hour effects on blood pressure and on 24-hour exercise responses of heart rate, systolic pressure and rate pressure product. INDERAL LA can provide effective beta blockade for a 24-hour period.

The mechanism of the antihypertensive effect of INDERAL has not been established. Among the factors that may be involved in contributing to the antihypertensive action are (1) decreased cardiac output, (2) inhibition of renin release by the kidneys, and (3) diminution of tonic sympathetic nerve outflow from vasomotor centers in the brain. Although total peripheral resistance may increase initially, it readjusts to or below the pretreatment level with chronic use. Effects on plasma volume appear to be minor and somewhat variable. INDERAL has been shown to cause a small increase in serum potassium concentration when used in the treatment of hypertensive patients.

In angina pectoris, propranolol generally reduces the oxygen requirement of the heart at any given level of effort by blocking the catecholamine-induced increases in the heart rate, systolic blood pressure, and the velocity and extent of myocardial contraction. Propranolol may increase oxygen requirements by increasing left ventricular fiber length, end diastolic pressure and systolic ejection period. The net physiologic effect of beta-adrenergic blockade is usually advantageous and is manifested during exercise by delayed onset of pain and increased work capacity.

In dosages greater than required for beta blockade, INDERAL also exerts a quinidine-like or anesthetic-like membrane action which affects the cardiac action potential. The significance of the membrane action in the treatment of arrhythmias is uncertain.

The mechanism of the antimigraine effect of propranolol has not been established. Beta-adrenergic receptors have been demonstrated in the platelets of the brain.

Beta receptor blockade can be useful in conditions in which, because of pathologic or functional changes, sympathetic activity is detrimental to the patient. But there are also situations in which sympathetic stimulation is vital. For example, in patients with severely damaged hearts, adequate ventricular function is maintained by virtue of sympathetic drive which should be preserved. In the presence of AV block, greater than first degree, beta blockade may prevent the necessary facilitating effect of sympathetic activity on conduction. Beta blockade results in bronchial constriction by interfering with adrenergic bronchodilator activity which should be preserved in patients subject to bronchospasm.

Propranolol is not significantly dialyzable.
INDICATIONS AND USAGE. Hypertension: INDERAL LA is indicated in the management of hypertension; it may be used alone or used in combination with other antihypertensive agents, particularly a thiazide diuretic. INDERAL LA is not indicated in the management of hypertensive emergencies.

Angina Pectoris Due to Coronary Atherosclerosis: INDERAL LA is indicated for the long-term management of patients with angina pectoris.

Migraine: INDERAL LA is indicated for the prophylaxis of common migraine headache. The efficacy of propranolol in the treatment of a migraine attack that has started has not been established and propranolol is not indicated for such use.

Hypertrophic Subaortic Stenosis: INDERAL LA is useful in the management of hypertrophic subaortic stenosis, especially for treatment of exertional or other stress-induced angina, palpitations, and syncope. INDERAL LA also improves exercise performance. The effectiveness of propranolol hydrochloride in this disease appears to be due to a reduction of the elevated outflow pressure gradient which is exacerbated by beta-receptor stimulation. Clinical improvement may be temporary.
CONTRAINDICATIONS. INDERAL is contraindicated in 1) cardiogenic shock, 2) sinus bradycardia and greater than first degree block; 3) bronchial asthma, 4) congestive heart failure (see WARNINGS) unless the failure is secondary to a tachyarrhythmia treatable with INDERAL.
WARNINGS. CARDIAC FAILURE: Sympathetic stimulation may be a vital component supporting circulatory function in patients with congestive heart failure, and its inhibition by beta blockade may precipitate more severe failure. Although beta blockers should be avoided in overt congestive heart failure, if necessary, they can be used with close follow-up in patients with a history of failure who are well compensated and are receiving digitalis and diuretics. Beta-adrenergic blocking agents do not abolish the inotropic action of digitalis on heart muscle.

IN PATIENTS WITHOUT A HISTORY OF HEART FAILURE, continued use of beta blockers can, in some cases, lead to cardiac failure. Therefore, at the first sign or symptom of heart failure, the patient should be digitalized and/or treated with diuretics, and the response observed closely; or INDERAL should be discontinued (gradually, if possible).

IN PATIENTS WITH ANGINA PECTORIS, there have been reports of exacerbation of angina and, in some cases, myocardial infarction, following abrupt discontinuance of INDERAL therapy. Therefore, when discontinuance of INDERAL is planned the dosage should be gradually reduced over at least a few weeks, and the patient should be cautioned against interruption or cessation of therapy without the physician's advice. If INDERAL therapy is interrupted and exacerbation of angina occurs, it usually is advisable to reinstitute INDERAL therapy and take other measures appropriate for the management of unstable angina pectoris. Since coronary artery disease may be unrecognized, it may be prudent to follow the above advice in patients considered at risk of having occult atherosclerotic heart disease who are given propranolol for other indications.

Nonallergic Bronchospasm (e.g., chronic bronchitis, emphysema)—PATIENTS WITH BRONCHOSPASTIC DISEASES SHOULD IN GENERAL NOT RECEIVE BETA BLOCKERS. INDERAL should be administered with caution since it may block bronchodilation produced by endogenous and exogenous catecholamine stimulation of beta receptors.

MAJOR SURGERY: The necessity or desirability of withdrawal of beta-blocking therapy prior to major surgery is controversial. It should be noted, however, that the impaired ability of the heart to respond to reflex adrenergic stimuli may augment the risks of general anesthesia and surgical procedures.

INDERAL (propranolol HCl), like other beta blockers, is a competitive inhibitor of beta-receptor agonists and its effects can be reversed by administration of such agents, e.g., dobutamine or isoproterenol. However, such patients may be subject to protracted severe hypotension. Difficulty in starting and maintaining the heartbeat has also been reported with beta blockers.

DIABETES AND HYPOGLYCEMIA: Beta-adrenergic blockade may prevent the appearance of certain premonitory signs and symptoms (pulse rate and pressure changes) of acute hypoglycemia in labile insulin-dependent diabetes. In these patients, it may be more difficult to adjust the dosage of insulin.

THYROTOXICOSIS: Beta blockade may mask certain clinical signs of hyperthyroidism. Therefore, abrupt withdrawal of propranolol may be followed by an exacerbation of symptoms of hyperthyroidism, including thyroid storm. Propranolol does not distort thyroid function tests.

IN PATIENTS WITH WOLFF-PARKINSON-WHITE SYNDROME, several cases have been reported in which, after propranolol, the tachycardia was replaced by a severe bradycardia requiring a demand pacemaker. In one case this resulted after an initial dose of 5 mg propranolol.
PRECAUTIONS. *General:* Propranolol should be used with caution in patients with impaired hepatic or renal function. INDERAL is not indicated for the treatment of hypertensive emergencies.

Beta adrenoreceptor blockade can cause reduction of intraocular pressure. Patients should be told that INDERAL may interfere with the glaucoma screening test. Withdrawal may lead to a return of increased intraocular pressure.

Clinical Laboratory Tests: Elevated blood urea levels in patients with severe heart disease, elevated serum transaminase, alkaline phosphatase, lactate dehydrogenase.

DRUG INTERACTIONS: Patients receiving catecholamine-depleting drugs such as reserpine should be closely observed if INDERAL is administered. The added catecholamine-blocking action may produce an excessive reduction of resting sympathetic nervous activity which may result in hypotension, marked bradycardia, vertigo, syncopal attacks, or orthostatic hypotension.

Carcinogenesis, Mutagenesis, Impairment of Fertility. Long-term studies in animals have been conducted to evaluate toxic effects and carcinogenic potential. In 18-month studies in both rats and mice, employing doses up to 150 mg/kg/day, there was no evidence of significant drug-induced toxicity. There were no drug-related tumorigenic effects at any of the dosage levels. Reproductive studies in animals did not show any impairment of fertility that was attributable to the drug.

Pregnancy: Pregnancy Category C. INDERAL has been shown to be embryotoxic in animal studies at doses about 10 times greater than the maximum recommended human dose.

There are no adequate and well-controlled studies in pregnant women. INDERAL should be used during pregnancy only if the potential benefit justifies the potential risk to the fetus.

Nursing Mothers: INDERAL is excreted in human milk. Caution should be exercised when INDERAL is administered to a nursing woman.

Pediatric Use: Safety and effectiveness in children have not been established.
ADVERSE REACTIONS. Most adverse effects have been mild and transient and have rarely required the withdrawal of therapy.

Cardiovascular: bradycardia; congestive heart failure; intensification of AV block; hypotension; paresthesia of hands; thrombocytopenic purpura, arterial insufficiency, usually of the Raynaud type.

Central Nervous System: lightheadedness; mental depression manifested by insomnia, lassitude, weakness, fatigue; reversible mental depression progressing to catatonia; visual disturbances; hallucinations; an acute reversible syndrome characterized by disorientation for time and place, short-term memory loss, emotional lability, slightly clouded sensorium, and decreased performance on neuropsychometrics.

Gastrointestinal: nausea, vomiting, epigastric distress, abdominal cramping, diarrhea, constipation, mesenteric arterial thrombosis, ischemic colitis.

Allergic: pharyngitis and agranulocytosis, erythematous rash, fever combined with aching and sore throat, laryngospasm and respiratory distress.

Respiratory: bronchospasm.

Hematologic: agranulocytosis, nonthrombocytopenic purpura, thrombocytopenic purpura.

Auto-Immune: In extremely rare instances, systemic lupus erythematosus has been reported.

Miscellaneous: alopecia, LE-like reactions, psoriasiform rashes, dry eyes, male impotence, and Peyronie's disease have been reported rarely. Oculomucocutaneous reactions involving the skin, serous membranes and conjunctivae reported for a beta blocker (practolol) have not been associated with propranolol.
DOSAGE AND ADMINISTRATION. INDERAL LA provides propranolol hydrochloride in a sustained-release capsule for administration once daily. If patients are switched from INDERAL tablets to INDERAL LA capsules, care should be taken to assure that the desired therapeutic effect is maintained. INDERAL LA should not be considered a simple mg for mg substitute for INDERAL. INDERAL LA has different kinetics and produces lower blood levels. Retitration may be necessary especially to maintain effectiveness at the end of the 24-hour dosing interval.

HYPERTENSION—*Dosage must be individualized.* The usual initial dosage is 80 mg INDERAL LA once daily, whether used alone or added to a diuretic. The dosage may be increased to 120 mg once daily or higher until adequate blood-pressure control is achieved. The usual maintenance dosage is 120 to 160 mg once daily. In some instances a dosage of 640 mg may be required. The time needed for full hypertensive response to a given dosage is variable and may range from a few days to several weeks.

ANGINA PECTORIS—*Dosage must be individualized.* Starting with 80 mg INDERAL LA once daily, dosage should be gradually increased at three to seven day intervals until optimum response is obtained. Although individual patients may respond at any dosage level, the average optimum dosage appears to be 160 mg once daily. In angina pectoris, the value and safety of dosage exceeding 320 mg per day have not been established.

If treatment is to be discontinued, reduce dosage gradually over a period of a few weeks (see WARNINGS).

MIGRAINE—*Dosage must be individualized.* The initial oral dose is 80 mg INDERAL LA once daily. The usual effective dose range is 160-240 mg once daily. The dosage may be increased gradually to achieve optimum migraine prophylaxis. If a satisfactory response is not obtained within four to six weeks after reaching the maximum dose, INDERAL LA therapy should be discontinued. It may be advisable to withdraw the drug gradually over a period of several weeks.

HYPERTROPHIC SUBAORTIC STENOSIS—80-160 mg INDERAL LA once daily

PEDIATRIC DOSAGE—At this time the data on the use of the drug in this age group are too limited to permit adequate directions for use.

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State of the Art: Bacterial Meningitis in Adults

Leon G. Smith, M.D., Newark*

The rapid diagnosis and early treatment of bacterial meningitis depends on clinical acumen and a good sense of urgency.

The diagnosis of bacterial meningitis, an inflammation of the covering of the brain and spinal cord, is based on a clinical picture of throbbing headache, fever, normal sensorium that may become cloudy, and nuchal rigidity. The diagnosis of meningitis in adults generally depends on a simple straightforward clinical impression confirmed by neutrophils in the spinal fluid.

DIAGNOSIS

Meningeal irritation can be demonstrated by the Brudzinski's sign, which is elicited by neck flexion followed by spontaneous knee and hip flexion and by the Kernig's sign, which rarely is useful in adults because it is difficult to bring the thighs and legs to a complete right angle with the trunk.

Once meningitis is suspected, one is obliged to do a spinal tap immediately. If there are focal neurological signs, papilledema, or a history of sinusitis with a suspected brain abscess, the spinal tap may be delayed until a computed tomographic scan of the brain is done. In such cases, either a cysterna magna tap is performed or therapy is instituted before a spinal tap. Normally, one can perform a diagnostic spinal tap without herniation with a small spinal needle to obtain a small amount of spinal fluid to perform a cell count, Gram's stain, bacterial cultures, levels of sugar, protein and antigen studies. If the spinal fluid is grossly cloudy, intravenous antibiotic therapy should be instituted even before the needle is removed, and the cell count must be done immediately. If there are neutrophils present, immediate antibiotics are essential. Laboratory personnel must stop all the other duties and assist the physician by performing a stat Gram's stain of a centrifuged spinal fluid sample. It is essential that the slide be cleansed properly with alcohol before the fluid is allowed to air dry and, later, barely fixed with heat. The interpretation of the Gram's stain requires experience and must not be over-read. Gram-positive intracellular lancet-shaped organisms usually are *Streptococcus pneumoniae*. On the other hand, gram-negative intracellular bean-shaped organisms are *Neisseria meningitidis* and gram-negative pleomorphic bacteria are usually *Hemophilus influenzae* type B. Recent antibiotics can alter the gram-staining qualities of some bacteria and may even alter its form. Nevertheless, Gram's stain remains a very helpful early procedure to use.

A spinal fluid glucose level of less than two-thirds of a simultaneously performed plasma glucose level reflects interference in the transportation of sugar across the choroid plexus due to severe inflammation. The CSF protein determination is not an emergency

*Dr. Smith is Director, Department of Medicine, Saint Michael's Medical Center, Newark. Correspondence may be addressed to Dr. Smith, Saint Michael's Medical Center, 306 Martin Luther King, Jr. Boulevard, Newark, NJ 07102.

test; a high reading reflects the increase of inflammation and may reach 1 to 3 g/dL in pneumococcal or tuberculous meningitis. Spinal fluid antigen may be helpful if available. These antigens can be counter immune electrophoresis (C.I.E.) with a 70 percent detection rate while latex fixation has a slightly better yield. Eliza may replace both tests. The limulus test for gram-negative endotoxin may be employed in patients with negative cultures. C. reactive protein spinal fluid elevations are used as an index of bacterial infection in England. Lactic acid and lactic acid dehyrogenase elevations suggest bacterial infection as well.

On occasions, a second tap is needed within four hours if no neutrophils are found on the first tap and the clinical picture is that of meningitis. On rare occasions, all of the clinical signs are missing especially when a patient is being treated with steroids, has renal failure, or is infected by an organism, such as *Listeria monocytogenes* with low-grade pathogenicity. In these situations, it is mandatory to perform a spinal tap as early as possible. On occasion tetanus, severe cervical arthritis in the elderly with fever, trichinosis, polymyositis, and neck space infections (especially of the postpharyngeal area) may produce meningismus that simulates meningitis.

Other useful studies include: sinus x-rays, blood cultures, a buffy coat Gram's stain of the peripheral blood, and impression smears and biopsy of skin lesions.

TREATMENT

The treatment of meningitis must be started within minutes of the clinical impression and spinal tap since the prognosis depends so much on early aggressive high-dose antimicrobial therapy. If the patient has classical meningococcemia with rash and meningitis, aqueous penicillin in dosages of two million units every two hours intravenously, is needed. However, if the causative agent is in doubt, broader coverage is needed. The addition of chloramphenicol, 1 gm every six hours intravenously, is needed to treat *Hemophilus influenzae*, which has a 10 to 20 percent incidence of ampicillin resistance. If *Listeria monocytogenes* is suspected, the penicillin alone will suffice. Gram-negative meningitis other than *Pseudomonas* species, on the other hand, requires cefotaxime or moxalactam. Moxalactam does not cover the pneumococcus and also can cause spontaneous bleeding. *Pseudomonas aeruginosa* requires a four generation penicillin such as piperacillin (18 gm/d) and tobramycin (3 to 5 mg/kg/d).

SPECIAL CONSIDERATIONS

The mortality rate of meningococcus and *H. influenzae* can be reduced to 5 percent if vigorous treatment is started early. Therapy has not improved significantly the mortality of pneumococcal meningitis which is 20 percent, and is even higher in elderly patients. Pneumococcal meningitis has a higher morbidity rate of deafness, hydrocephalous, blindness, subdural and brain abscesses, and venous infarctions than meningitis due to bacteria.

Neisseria meningitidis requires special comment as it produces endotoxic shock early as well as intravascular clotting. No bacteria can be more explosive in its onset and few bacteria respond as quickly to fluid, clotting factor replacement, and antibiotics. Prophylactic treatment is necessary to members of the same family or closed population household members for the meningococcus. Sulfadiazine (1 gm twice daily for three days) still is the best therapy, when the organism occurs during an epidemic with a sensitive organism. For the population as a whole, rifampin (600 mg stat and 300 mg twice daily for three days) is 70 percent effective. Minocycline (200 mg stat and 100 mg twice daily for three days) is equally effective but less well tolerated by some because of vestibular symptoms. *H. influenzae* prophylaxis is reserved for children of household members. Nurses, housestaff, ambulance, and schoolmates need not take any prophylaxis unless there is mouth-to-mouth breathing or prolonged contact. In case of a school epidemic, meningococcal vaccine and/or rifampin may be applicable depending on the type of epidemic, for which there are type A and C vaccines.

Special bacterial infections should be noted. First, posthead trauma meningitis usually means a fracture in the cribriform plate. Prophylaxis with ampicillin at the time of fracture may be as preventive as pneumococcus and occasionally *Hemophilus* are the most common organisms. Secondly, recurrent purulent meningitis means a continuous leak of the spinal fluid from a cribriform plate or a parameningeal focus such as sinusitis or osteomyelitis. Special x-ray, CT, and dye studies are needed for delineation of this area, which may suggest the need for surgical intervention.

Rarer forms of meningitis are listerial, tuberculous, syphilitic, postsurgical and nosocomial pathogens, endocarditis organism, and leptospirosis. *Listeria* tends to develop in the compromised host with neutrophils, lymphocytes, and red cells in the spinal fluid. Pregnant women, alcoholics, and renal dialysis patients are at high risk. Syphilis, the great mimicker, should be suspected in all sexually active people. Tuberculosis can mimic purulent meningitis with many neutrophils in the spinal fluid and always must be considered when the routine cultures are sterile. Nosocomial meningitis either is due to *S. aureus* or *S. epidermidis* or a gram-negative bacteria. These patients tend to be less toxic and more tolerant of their infections than those suffering with the hematogenous variety. Proper culture of the spinal fluid yields the diagnosis. Endocarditis patients can have a sterile, white cell spinal fluid response or more rarely, a purulent embolic meningitis with *S. aureus* as the primary culprit. Enterococcus or alpha streptococcus in the spinal fluid means endocarditis as well. Similarly, pneumococcal meningitis and pneumonia generally reflect endocarditis as well. Leptospiral meningitis can be very purulent and sterile and must be searched for in rural, waterfront, dog-loving, or traveling people. A simple serological precipitant test makes the diagnosis and only early penicillin or tetracycline therapy alters the outcome. Salmonella meningitis is rare in the United States and may reflect extension from an abdominal aneurysm.

There are a few noninfectious conditions that simulate purulent meningitis, such as postsubarachnoid bleeding, postfourth ventricular surgery, and chemical meningitis from certain dyes and drugs, i.e. sulindac and anti-inflammatory drugs.

Case Report: Intraluminal Duodenal Diverticulum

Robert S. Altin, M.D., Walter S. Rose, M.D., Wayne R. Braendle, M.D., Long Branch*

Intraluminal duodenal diverticuli are saclike structures within the lumen of the duodenum. Symptoms usually relate to intermittent obstruction. Upper gastrointestinal series is diagnostic, with the dense barium-filled diverticulum surrounded by a lucent halo of the diverticular wall. This report and literature review should alert the reader to the problem.

Intraluminal duodenal diverticuli have a diagnostic appearance on upper gastrointestinal examination with barium. A case report will illustrate the problem.[1]

CASE REPORT

A 31-year-old male complained of vague recurrent abdominal pain. He had no history of peptic ulcer disease or gastrointestinal bleeding. A single contrast upper gastrointestinal series revealed no obstruction to the passage of barium from the oropharynx to the jejunum. A barium-filled sac easily was visible in the second portion of the duodenum; it was outlined by a radiolucent halo (Figure 1). An upright view demonstrated an air-barium level within the diverticulum (Figure 2). On fluoroscopy, it was seen to change in size and shape.

DISCUSSION

Intraluminal duodenal diverticuli were first demonstrated pathologically in 1895, but it was not until 1947 that the radiographic appearance was described.[2] Authors attribute the lesion to an incomplete congenital duodenal diaphragm which has dilated due to peristaltic activity. Eventually, as a result of peristalsis of duodenal contents causing continuing stress, the semicircular partial diaphragm becomes a diverticulum with a small circumferential attachment to the duodenal wall. Duodenal mucosa covers both sides of the diverticulum. This is the only place in the gastrointestinal tract where this occurs. An alternative theory postulates a form of intestinal duplication.[3] The rare occurrence of an intraluminal diverticulum in infancy could not be easily explained by ballooning of a diaphragm. The persistence of a vestigial duplication would explain this lesion in neonates.[4]

Symptoms, when present, usually relate to intermittent obstruction of the duodenum. Multiple gallstones, as well as foreign bodies, have been found within diverticuli at surgery.[4] Nausea, vomiting, and epigastric pain have been reported. Melena also has been described, but at operation, hemorrhage only rarely has been related to the diverticulum itself.[5,6] Peptic ulceration has been found in several cases, both within and near the diverticulum.[1] Pancreatitis and intestinal intussusception also have been described.[7] Presentation has occurred predominantly in adults, but it has been found in children and neonates.[7]

Upper gastrointestinal series is diagnostic. The barium-filled diverticulum appears within the duodenal lumen on all views, and is surrounded by a

*Drs. Altin and Rose are affiliated with the Department of Radiology, Monmouth Medical Center, Long Branch, and Dr. Braendle is affiliated with the Department of Medicine, Riverview Medical Center, Red Bank. Correspondence may be addressed to Dr. Altin, Monmouth Medical Center, 300 Second Avenue, Long Branch, NJ 07740.

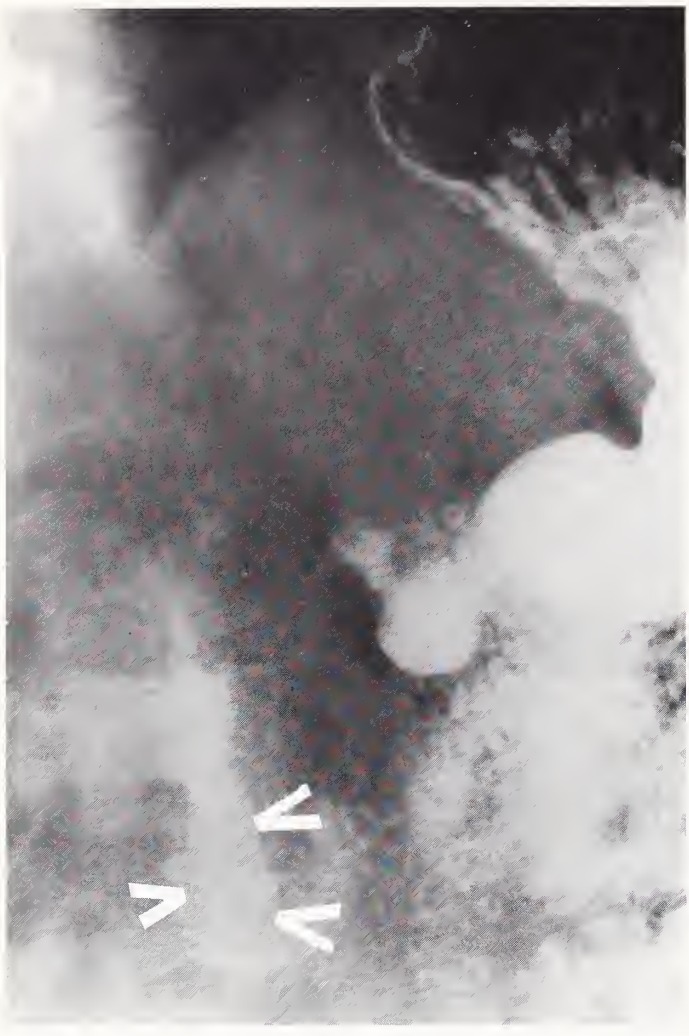


Figure 1—A representative film from an upper gastrointestinal series demonstrates a barium-filled density surrounded by a radiolucent halo in the postbulbar duodenum (arrow). This is the diagnostic appearance of an intraluminal duodenal diverticulum.

thin halo, which is the diverticular wall. There may be dilatation of the proximal duodenum, and the diverticulum may be seen to fill and empty on fluoroscopy. Nonfilling of the diverticulum can be confusing and may suggest a mass lesion. Foreign bodies occasionally are trapped within it, as described, and can be more or less dense than the barium. Associated gastrointestinal tract abnormalities, especially related to anomalous placement of the biliary and pancreatic ducts, may be of surgical importance.[1-7]

Endoscopy generally is not considered because the diverticulum will collapse ahead of the endoscope making it difficult to see the lesion.

Operative treatment usually is reserved for complications or associated conditions. Conservative treatment is adequate in most cases.[5] Annular pancreas, aberrant bile and pancreatic ducts, and additional duodenal septa are examples of anatomic variants, especially in children. Nine of ten children with "wind-sock" webs also had multiple congenital abnormalities. Six children had incomplete rotation of the gut, five children had a second source of intestinal obstruction, and three children had situs inversus.[4] The diverticulum usually arises near the ampulla of Vater, which may



Figure 2—An upright view of the same area demonstrates an air-barium level within the diverticulum (arrows).

be damaged during resection of the sac.[1] Surgery can be difficult, with the diverticulum tending to collapse and retreat from the palpating finger. One easily can miss the diverticulum. One patient underwent laparotomy three times before the diagnosis was made at autopsy. For these reasons, surgical intervention should be reserved for patients with severe, persisting symptoms.[4]

SUMMARY

Intraluminal duodenal diverticuli are uncommon lesions. Symptoms usually relate to intermittent intestinal obstruction. UGI series is diagnostic. The diverticulum is seen as a barium-filled sac within the duodenum on all views. The wall is visualized as a radiolucent halo. They have been reported from infancy to adulthood. Several theories of formation are discussed and associated anomalies of the gastrointestinal tract are described. Conservative treatment usually suffices, with surgery usually reserved for severe and persisting symptoms, as well as complications.

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Case Report: An Unusual Occult Bronchial Foreign Body

Eli B. Halpern, M.D., and Stuart Morgenstein, D.O., Stratford*

Foreign body aspiration can produce a variety of challenging signs and symptoms, especially when the history of aspiration is occult. Our case involves a patient in a motor vehicle accident ten years earlier, with loss of consciousness, serious facial and abdominal injuries, and unrecognized foreign body aspiration of windshield glass.

A 52-year-old white male came to our emergency room complaining of progressive dyspnea, fatigue, retrosternal chest pain, and chronic productive cough over the previous few days. The patient had a lengthy history of multiple hospital admissions for recurrent bouts of pneumonia and chronic obstructive pulmonary disease. He also had a history of type II diabetes mellitus, hypertension, and myocardial infarction. He smoked two packs of cigarettes a day and drank one to two six-packs of beer a week. The patient's pulmonary status was considered so poor that, at his previous hospital admission at another institution, he was told that his prognosis was hopeless. The only other pertinent past medical history was a prolonged hospitalization in 1972 for multiple injuries incurred in a motor vehicle accident requiring a laparotomy, open reduction of multiple facial bone fractures, and a tracheostomy for airway management. The patient had a long and stormy postoperative course and required lengthy and extensive rehabilitation to re-establish many of his cognitive functions and motor skills.

Physical examination in the emergency room revealed a white male in obvious respiratory distress. The patient's temperature was 98°, blood pressure was 150/100, heart rate was 150 beats/minute, and respirations were 30/minute. The ear, nose, and throat examination was unremarkable except for cyanosis around the lips. The heartbeat was regular and rapid. Lungs had bilateral rhonchi in all fields with expiratory wheezing. Also noted were diminished breath sounds in the left basilar area with a prolonged expiratory phase. Examination of the extremities revealed cyanotic nailbeds with clubbing and +2 pitting edema of both legs. Also noted were multiple healed facial scars.

Pertinent laboratory data include: arterial blood gases: (room air) pO_2 57, pCO_2 55, pH 7.15, HCO_2 20; hemoglobin, 16 gm/dl; hematocrit, 48%; white blood cell count, 10,500 with normal differential; chest x-ray, left lower lobe infiltrate with possible area of volume loss in view of slight shift of trachea and mediastinal structures to the left; and electrocardiogram: sinus rhythm and no acute changes.

Serial blood gases in the emergency room revealed progressive deterioration of the patient's pO_2 and pCO_2 . The patient was intubated, placed on a respirator and transferred to the medical intensive care unit. While in the intensive care unit, he received several weeks of intravenous bronchodilators, antibiotics, and aggressive pulmonary toilet. A tracheostomy was performed to facilitate pulmonary toilet and removal of

*From the Department of Otolaryngology, John F. Kennedy Memorial Hospital, Stratford. Correspondence may be addressed to Dr. Halpern, Route 130 and New Albany Road, Cinnaminson, NJ 08077.

retained secretions. Serial chest x-rays failed to show resolution of the left lower lobe infiltrate, initially thought to be a pneumonic process and a major contributory cause of the respiratory failure. Despite some improvement clinically, numerous attempts to wean the patient off the respirator failed. Flexible fiberoptic bronchoscopy revealed 90 percent obstruction of the left main stem bronchus by an apparent tumor with an assumed distal pneumonic process. Excessive thick secretions and mucous plugs and atelectasis of the left lower lobe were noted. Bronchial lavage and multiple biopsies of the apparent tumor were obtained. Pathology report on the submitted specimens showed chronic inflammation and focal squamous metaplasia and papillary hyperplasia.

The presumptive diagnosis of the left main stem tumor with a secondary pneumonia was maintained. The intravenous medicine and pulmonary toilet were continued. However, serial chest x-rays again failed to show improvement.

Two additional flexible fiberoptic bronchoscopies were performed, with similar findings and results obtained. The pathology reports on all specimens remained unchanged. The chest x-ray also was unchanged. After approximately two months of aggressive therapy, Dr. Halpern was consulted and hollow tube bronchoscopy was performed with the hope that more tissue could be obtained for a definitive diagnosis.

Hollow tube bronchoscopy was performed under local anesthesia through the tracheostomy site with a #8-40 Jackson bronchoscope. Operative findings revealed almost complete occlusion of the left main stem bronchus, approximately 3 cm below the carina. The obstruction was a smooth circumferential well-mucosalized mass. Multiple biopsies were again obtained, revealing papillomatous tissue. The postoperative chest x-ray was unchanged.

Repeat hollow tube bronchoscopy was performed and almost all obstructive tissue was removed with a 4 mm Roberts cup forceps. A foreign body occluding the left lower lobe distally was removed. The foreign body was a piece of tinted glass, measuring 15 x 25 x 3 mm, consistent with windshield glass (Figure).

Postoperative chest x-rays showed some improvement in the left lower lobe infiltrate with diminished volume loss. Eventually, the patient was weaned from the respirator, extubated, and transferred to a general medical floor, where he continued to improve.

DISCUSSION

Any patient with a lengthy history of recurrent pneumonia, chronic productive cough, dyspnea, wheezing, and persistent lung collapse, may have a tracheobronchial foreign body. The persistence of abnormal and localized chest x-ray findings, coupled with the presenting signs and symptoms, should make one contemplate a diagnosis of postoperative bronchiectasis secondary to a foreign body aspiration.[1] The persistence of a foreign body in the tracheobronchial tree often will cause irreparable bronchopulmonary lesions such as bronchiectasis, postinflammatory cysts, and pulmonary fibrosis.[2,3]

Even when three flexible fiberoptic bronchoscopies



Figure—Windshield glass removed from left lower lobe 11 years after aspiration.

revealed only reactive granulation tissue and fibrosis and no clear evidence of malignancy, there still was no suspicion of a foreign body type reaction. The presumptive diagnosis of a malignancy was steadfastly maintained. It was only through the determination to obtain a tissue diagnosis of a malignancy that eventually the foreign body was discovered and removed.

This case illustrated a specific advantage of hollow tube over flexible bronchoscopy. The rigid scope enabled the examiner to advance further down the obstructed left main stem bronchus, remove tissue which could not be removed by the flexible scope, and, finally, outline and remove the foreign body.

The history and physical examination were important. The knowledge of severe facial trauma ten years earlier requiring extensive surgical exploration and repair of multiple fractures contributes to a suspicion of a foreign body aspiration.

The size of the foreign body (15 x 25 x 3 mm) compared to the 1 to 1.23 cm diameter of the average left mainstem bronchus[4] explains why the left lower lung collapse persisted despite aggressive pulmonary toilet.

SUMMARY

A case history is reported of an unusual type of occult bronchial foreign body with unusual duration without detection. The diagnosis should be considered strongly in any patient with a lengthy history of recurrent, intractable pneumonia. The diagnosis of a foreign body aspiration often is a historical one and, indeed, one can assume that the foreign body was aspirated in the automobile accident of 1972. However, definitive diagnosis and treatment can be made only under direct visualization via flexible and/or hollow tube bronchoscopy.

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Case Report: Aspirated Foreign Body Acting as Tumor Marker

Evan S. Pokorney, M.D., and L. Fred Ayvazian, M.D., East Orange*

The majority of aspirated foreign bodies are expelled spontaneously. This report describes the retention of an aspirated peanut at an area of bronchus physiologically compromised by an occult cancer. The incident resulted in the discovery of the tumor and led to its successful resection.

Among healthy and alert adults, over 80 percent of aspirated bodies are expelled spontaneously.[1] A number of factors impair the protective reflex capabilities of the lung—most commonly pulmonary diseases, alcohol overuse, sedation, and advancing age—and favor retention of aspirated material.[2] This report describes an instance in which a silent endobronchial carcinoma served to harbor an aspirated peanut, with the history of aspiration leading to the cancer's early detection and treatment.

CASE REPORT

A 60-year-old man was hospitalized on July 23, 1980, with nonproductive cough, right pleuritic chest pain of two days' duration, and a temperature elevation to 40°C. He had experienced a paroxysm of coughing one week earlier while driving his car and eating peanuts. Before hospital admission he was treated with erythromycin by a private physician. Other than for cigarette smoking, the patient's past history was unremarkable.

The patient's admission oral temperature was 39.3°C and respiratory rate 16/min. General physical and chest examination were normal. White blood cell count was 13,400 with a shift to the left. Chest x-ray showed opacification of the right middle lobe which on lateral projection was diminished in volume and lacked air-outlined bronchi (Figures 1 and 2). Gram stain of the sputum showed a mixed flora without predominance. Erythromycin therapy was continued.

On the third hospital day, bronchoscopy showed purulent material exuding from the right middle lobe and a foreign body just beyond the branching of the lobe's bronchus. The mucosa on which the particle rested was friable and hypertrophic in appearance, limiting access to the lower lobe. The foreign body was removed and proved to be the main portion of a peanut (Figure 3). The area of visibly altered mucosa was sampled and the biopsy reading was squamous cell carcinoma. Mediastinoscopy was normal. Recognizing the possibility of foreign body reaction with metaplasia mimicking carcinoma, bronchoscopy was repeated two weeks later; abnormal mucosa again was seen and identified as carcinoma microscopically. On August 14, 1980, the right middle and lower lobes were excised surgically with subsequent pathologic confirmation of squamous cell carcinoma of the lung without evidence of local or lymphatic extension. After an uneventful postoperative period, the patient was discharged and followed in the pulmonary clinic. He remains symptom free and without evidence of disease four years after surgery.

*From the Pulmonary Section, Veterans Administration Medical Center, East Orange, where Dr. Pokorney is Staff Physician and Dr. Ayvazian is Chief. Correspondence may be addressed to Dr. Pokorney, Veterans Administration Medical Center, East Orange, NJ 07019.



Figure 1—Posteroanterior chest film shows opacification of the right middle lobe without air-outlined bronchi.



Figure 2—Lateral chest film shows diminished volume of consolidated right middle lobe.

DISCUSSION

Inhaled foreign bodies are a major cause of accidental death in children[3] but in alert adults with intact tracheobronchial defenses, retention of aspirated material is uncommon.[1] In at least two-thirds of instances, the history of aspiration is not offered spontaneously and is apt to be remembered by the patient only after leading questioning.[2,4] The aspirated objects usually lodge at the right mainstem bronchus and infrequently on the left; the major symptom is cough, with or without infection.[2,5] Organic foodstuffs comprise the majority of aspirated matter with the nature differing according to ethnic habits (peanuts in the United States; melon seeds in the Arabic countries).[6] Most of these aspirates are nonopaque and rarely disclosed by x-rays.[5] Obstructing lesions may cause segmental or lobar collapse (with volume loss and without air-bronchogram patterns), recurrent infections at the same location, lung abscess, pseudosequestration, and—particularly, with delay in diagnosis—bronchiectasis.[1,2,4] Since the oils and salts

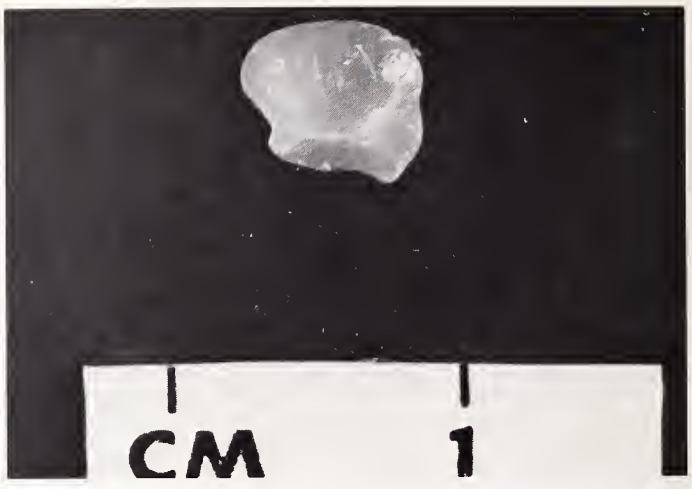


Figure 3—Section of peanut removed at bronchoscopy.

released from most organic foodstuffs act as mucosal irritants, the aspirated material may cause a cellular metaplasia histologically suggesting neoplastic changes.[5]

The normal airway defenses against aspirated matter include coughing (with the powerful expulsive forces of airflow and bronchoconstriction) and mucociliary activity. Using random concentrations of ammonia gas as an irritant for the quantitative measurement of these protective airway reflexes, Pontoppidan has shown a six-fold increase in mean threshold responses with advancing age among 103 subjects from the second to the ninth decades of life with the steepest change seen after 55 years, concluding that loss of sensitivity permits the aspiration and the silent retention of foreign bodies.[7]

The patient described in this report failed to dislodge and expel an aspirated foreign body from an area of lung rendered physiologically undefended by a cancer that denuded bronchial mucosa and locally destroyed normal reflex activity. The accident of aspiration may have served to herald the tumor, leading to surgical resection and apparent cure.

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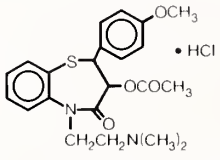
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In animal models, diltiazem interferes with the slow inward (depolarizing) current in excitable tissue. It causes excitation-contraction uncoupling in various myocardial tissues without changes in the configuration of the action potential. Diltiazem produces relaxation of coronary vascular smooth muscle and dilation of both large and small coronary arteries at drug levels which cause little or no negative inotropic effect. The resultant increases in coronary blood flow (epicardial and subendocardial) occur in ischemic and nonischemic models and are accompanied by dose-dependent decreases in systemic blood pressure and decreases in peripheral resistance.

Hemodynamic and Electrophysiologic Effects. Like other calcium antagonists, diltiazem decreases sinoatrial and atrioventricular conduction in isolated tissues and has a negative inotropic effect in isolated preparations. In the intact animal, prolongation of the AH interval can be seen at higher doses.

In man, diltiazem prevents spontaneous and ergonovine-provoked coronary artery spasm. It causes a decrease in peripheral vascular resistance and a modest fall in blood pressure and, in exercise tolerance studies in patients with ischemic heart disease, reduces the heart rate-blood pressure product for any given work load. Studies to date, primarily in patients with good ventricular function, have not revealed evidence of a negative inotropic effect; cardiac output, ejection fraction, and left ventricular end diastolic pressure have not been affected. There are as yet few data on the interaction of diltiazem and beta-blockers. Resting heart rate is usually unchanged or slightly reduced by diltiazem.

Intravenous diltiazem in doses of 20 mg prolongs AH conduction time and AV node functional and effective refractory periods approximately 20%. In a study involving single oral doses of 300 mg of CARDIZEM in six normal volunteers, the average maximum PR prolongation was 14% with no instances of greater than first-degree AV block. Diltiazem-associated prolongation of the AH interval is not more pronounced in patients with first-degree heart block. In patients with sick sinus syndrome, diltiazem significantly prolongs sinus cycle length (up to 50% in some cases).

Chronic oral administration of CARDIZEM in doses of up to 240 mg/day has resulted in small increases in PR interval, but has not usually produced abnormal prolongation. There were, however, three instances of second-degree AV block and one instance of third-degree AV block in a group of 959 chronically treated patients.

Pharmacokinetics and Metabolism. Diltiazem is absorbed from the tablet formulation to about 80% of a reference capsule and is subject to an extensive first-pass effect, giving an absolute bioavailability (compared to intravenous dosing) of about 40%. CARDIZEM undergoes extensive hepatic metabolism in which 2% to 4% of the unchanged drug appears in the urine. In vitro binding studies show CARDIZEM is 70% to 80% bound to plasma proteins. Competitive ligand binding studies have also shown CARDIZEM binding is not altered by therapeutic concentrations of digoxin, hydrochlorothiazide, phenylbutazone, propranolol, salicylic acid, or warfarin. Single oral doses of 30 to 120 mg of CARDIZEM result in detectable plasma levels within 30 to 60 minutes and peak plasma levels two to three hours after drug administration. The plasma elimination half-life following single or multiple drug administration is approximately 3.5 hours. Desacetyl diltiazem is also present in the plasma at levels of 10% to 20% of the parent drug and is 25% to 50% as potent a coronary vasodilator as diltiazem. Therapeutic blood levels of CARDIZEM appear to be in the range of 50 to 200 ng/ml. There is a departure from dose-linearity when single doses above 60 mg are given; a 120-mg dose gave blood levels three times that of the 60-mg dose. There is no information about the effect of renal or hepatic impairment on excretion or metabolism of diltiazem.

INDICATIONS AND USAGE

1. **Angina Pectoris Due to Coronary Artery Spasm.** CARDIZEM is indicated in the treatment of angina pectoris due to coronary artery spasm. CARDIZEM has been shown effective in the treatment of spontaneous coronary artery spasm presenting as Prinzmetal's variant angina (resting angina with ST-segment elevation occurring during attacks).
2. **Chronic Stable Angina (Classic Effort-Associated Angina).** CARDIZEM is indicated in the management of chronic stable angina. CARDIZEM has been effective in controlled trials in reducing angina frequency and increasing exercise tolerance.

There are no controlled studies of the effectiveness of the concomitant use of diltiazem and beta-blockers or of the safety of this combination in patients with impaired ventricular function or conduction abnormalities.

CONTRAINDICATIONS

CARDIZEM is contraindicated in (1) patients with sick sinus syndrome except in the presence of a functioning ventricular pacemaker, (2) patients with second- or third-degree AV block except in the presence of a functioning ventricular pacemaker, and (3) patients with hypotension (less than 90 mm Hg systolic).

WARNINGS

1. **Cardiac Conduction.** CARDIZEM prolongs AV node refractory periods without significantly prolonging sinus node recovery time, except in patients with sick sinus syndrome. This effect may rarely result in abnormally slow heart rates (particularly in patients with sick sinus syndrome) or second- or third-degree AV block (six of 1243 patients for 0.48%). Concomitant use of diltiazem with beta-blockers or digitalis may result in additive effects on cardiac conduction. A patient with Prinzmetal's angina developed periods of asystole (2 to 5 seconds) after a single dose of 60 mg of diltiazem.
2. **Congestive Heart Failure.** Although diltiazem has a negative inotropic effect in isolated animal tissue preparations, hemodynamic studies in humans with normal ventricular function have not shown a reduction in cardiac index nor consistent negative effects on contractility (dp/dt). Experience with the use of CARDIZEM alone or in combination with beta-blockers in patients with impaired ventricular function is very limited. Caution should be exercised when using the drug in such patients.
3. **Hypotension.** Decreases in blood pressure associated with CARDIZEM therapy may occasionally result in symptomatic hypotension.
4. **Acute Hepatic Injury.** In rare instances, patients receiving CARDIZEM have exhibited reversible acute hepatic injury as evidenced by moderate to extreme elevations of liver enzymes. (See PRECAUTIONS and ADVERSE REACTIONS.)

PRECAUTIONS

General. CARDIZEM (diltiazem hydrochloride) is extensively metabolized by the liver and excreted by the kidneys and in bile. As with any new drug given over prolonged periods, laboratory parameters should be monitored at regular intervals. The drug should be used with caution in patients with impaired renal or hepatic function. In subacute and chronic dog and rat studies designed to produce toxicity, high doses of diltiazem were associated with hepatic damage. In special subacute hepatic studies, oral doses of 125 mg/kg and higher in rats were associated with histological changes in the liver which were reversible when the drug was discontinued. In dogs, doses of 20 mg/kg were also associated with hepatic changes; however, these changes were reversible with continued dosing.

Drug Interaction. Pharmacologic studies indicate that there may be additive effects in prolonging AV conduction when using beta-blockers or digitalis concomitantly with CARDIZEM. (See WARNINGS).

Controlled and uncontrolled domestic studies suggest that concomitant use of CARDIZEM and beta-blockers or digitalis is usually well tolerated. Available data are not sufficient, however, to predict the effects of concomitant treatment, particularly in patients with left ventricular dysfunction or cardiac conduction abnormalities. In healthy volunteers, diltiazem has been shown to increase serum digoxin levels up to 20%.

Carcinogenesis, Mutagenesis, Impairment of Fertility. A 24-month study in rats and a 21-month study in mice showed no evidence of carcinogenicity. There was also no mutagenic response in in vitro bacterial tests. No intrinsic effect on fertility was observed in rats.

Pregnancy. Category C. Reproduction studies have been conducted in mice, rats, and rabbits. Administration of doses ranging from five to ten times greater (on a mg/kg basis) than the daily recommended therapeutic dose has resulted in embryo and fetal lethality. These doses, in some studies, have been reported to cause skeletal abnormalities. In the perinatal/postnatal studies, there was some reduction in early individual pup weights and survival rates. There was an increased incidence of stillbirths at doses of 20 times the human dose or greater.

There are no well-controlled studies in pregnant women; therefore, use CARDIZEM in pregnant women only if the potential benefit justifies the potential risk to the fetus.

Nursing Mothers. It is not known whether this drug is excreted in human milk. Because many drugs are excreted in human milk, exercise caution when CARDIZEM is administered to a nursing woman if the drug's benefits are thought to outweigh its potential risks in this situation.

Pediatric Use. Safety and effectiveness in children have not been established.

ADVERSE REACTIONS

Serious adverse reactions have been rare in studies carried out to date, but it should be recognized that patients with impaired ventricular function and cardiac conduction abnormalities have usually been excluded.

In domestic placebo-controlled trials, the incidence of adverse reactions reported during CARDIZEM therapy was not greater than that reported during placebo therapy.

The following represent occurrences observed in clinical studies which can be at least reasonably associated with the pharmacology of calcium influx inhibition. In many cases, the relationship to CARDIZEM has not been established. The most common occurrences, as well as their frequency of presentation, are: edema (2.4%), headache (2.1%), nausea (1.9%), dizziness (1.5%), rash (1.3 asthenia (1.2%), AV block (1.1%). In addition, the following eve were reported infrequently (less than 1%) with the order of prese tion corresponding to the relative frequency of occurrence.

Cardiovascular:	Flushing, arrhythmia, hypotension, brady dia, palpitations, congestive heart faili syncope.
Nervous System:	Paresthesia, nervousness, somnolen tremor, insomnia, hallucinations, and amne
Gastrointestinal:	Constipation, dyspepsia, diarrhea, vomit mild elevations of alkaline phosphatase, S(SGPT, and LDH.
Dermatologic:	Pruritus, petechiae, urticaria, photosensiti
Other:	Polyuria, nocturia.

The following additional experiences have been noted:

A patient with Prinzmetal's angina experiencing episode vasospastic angina developed periods of transient asymptom asystole approximately five hours after receiving a single 60 dose of CARDIZEM.

The following postmarketing events have been reported i quently in patients receiving CARDIZEM: erythema multiforme; kopenia; and extreme elevations of alkaline phosphatase, SI SGPT, LDH, and CPK. However, a definitive cause and effect betv these events and CARDIZEM therapy is yet to be established.

OVERDOSAGE OR EXAGGERATED RESPONSE

Overdosage experience with oral diltiazem has been lim Single oral doses of 300 mg of CARDIZEM have been well toler by healthy volunteers. In the event of overdosage or exagger response, appropriate supportive measures should be employ addition to gastric lavage. The following measures may be consid

Bradycardia	Administer atropine (0.60 to 1.0 mg). If is no response to vagal blockade, admin isoproterenol cautiously.
High-Degree AV Block	Treat as for bradycardia above. Fixed l degree AV block should be treated with diac pacing.
Cardiac Failure	Administer inotropic agents (isoproter dopamine, or dobutamine) and diuretics.
Hypotension	Vasopressors (eg, dopamine or levarte bitartrate).

Actual treatment and dosage should depend on the severity clinical situation and the judgment and experience of the tre physician.

The oral/LD_{50}'s in mice and rats range from 415 to 740 m and from 560 to 810 mg/kg, respectively. The intravenous LD_5 these species were 60 and 38 mg/kg, respectively. The oral LI dogs is considered to be in excess of 50 mg/kg, while lethality seen in monkeys at 360 mg/kg. The toxic dose in man is not kr but blood levels in excess of 800 ng/ml have not been assoc with toxicity.

DOSAGE AND ADMINISTRATION

Exertional Angina Pectoris Due to Atherosclerotic nary Artery Disease or Angina Pectoris at Rest Due to nary Artery Spasm. Dosage must be adjusted to each pat needs. Starting with 30 mg four times daily, before meals a bedtime, dosage should be increased gradually (given in di doses three or four times daily) at one- to two-day intervals optimum response is obtained. Although individual patients respond to any dosage level, the average optimum dosage appears to be 180 to 240 mg/day. There are no available data co ing dosage requirements in patients with impaired renal or h function. If the drug must be used in such patients, titration sho carried out with particular caution.

Concomitant Use With Other Antianginal Agents:

1. **Sublingual NTG** may be taken as required to abort anginal attacks during CARDIZEM therapy.
2. **Prophylactic Nitrate Therapy** — CARDIZEM may be coadministered with short- and long-acting nitrates, but have been no controlled studies to evaluate the antia effectiveness of this combination.
3. **Beta-blockers.** (See WARNINGS and PRECAUTIONS.)

HOW SUPPLIED

Cardizem 30-mg tablets are supplied in bottles of 100 0088-1771-47) and in Unit Dose Identification Paks of 100 0088-1771-49). Each green tablet is engraved with MARION side and 1771 engraved on the other. CARDIZEM 60-mg tablets are supplied in bottles of 100 (NDC 0088-1772-47) and Dose Identification Paks of 100 (NDC 0088-1772-49). Each tablet is engraved with MARION on one side and 1772 on the

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IMAGING: MAGNETIC RESONANCE IMAGING OF THE SPINAL CORD*

KENNETH L. JEWEL, M.D., CALDWELL**

MRI is an extraordinary noninvasive modality capable of creating images in any anatomic plane without the use of ionizing radiation or the need for intravenous contrast injection. MRI has a high degree of sensitivity and excellent patient acceptance. It is the preferred screening test to evaluate the spinal cord.

Magnetic resonance imaging (MRI), also known as nuclear magnetic resonance imaging (NMR), is an exciting new diagnostic modality which combines the principles of image formation employing NMR as described by Lautebur in 1973[1] with the extraordinary technology of computerized tomography (CT) developed in the 1970s. MRI creates images in any anatomic plane without reformating, has unparalleled soft tissue contrast resolution, and has excellent spatial resolution. The images created with MRI are created without the use of ionizing radiation or intravenous contrast material. These features, coupled with greater sensitivity than CT,[2-4] make MRI the screening procedure of choice in the evaluation of the brain and spinal cord.[2-7]

MRI is useful in the evaluation of the pelvis,[8,9] liver,[10,11] pancreas,[12] kidneys,[13] adrenal glands,[14] heart,[15] and musculoskeletal system.[16] Its greatest application to date has been in the evaluation of the brain and central nervous system.[2-7,17,18] The advantages of MRI of the brain recently have been described in this journal.[19]

During the course of one year, we have confirmed the clinical usefulness of MRI of the spinal cord in a private radiology office. Traditionally, the primary radiologic means of evaluating the spinal cord and its surrounding tissues have been plain film radiography, myelography, and x-ray CT with or without intrathecal contrast enhancement. Reports in the recent literature[20] indicate that MRI is an extraordinarily useful, noninvasive means of evaluating spinal disorders and, in fact, is the screening procedure of choice in the neuroradiologic study of the spinal cord.

METHOD

The MRI images displayed are obtained on a Diasonics 0.5 Tesla superconductive magnet operating at a field strength of 3.5 Kgauss and corresponding to a resonant frequency of 15MHz for hydrogen nuclei. The Diasonics imager employs a multislice, multiecho imaging technique and the operator can select various imaging parameters controlling the pulse repetition rate (TR) which alters the sensitivity, character, and appearance of the images. While imaging can be performed in any anatomic plane, the sagittal projection has been found to be most clinically useful. All patients are studied with at least two imaging techniques to ensure the highest degree of image quality and diagnostic accuracy. Generally, an imaging sequence with a short TR (0.5) and a longer TR (1.5) are utilized to enhance the visualization of the spinal cord and

*IMAGING is presented in *The Journal* under the direction of Judith K. Amorosa, M.D., Director of Medical Education, Department of Radiology, UMDNJ-Rutgers Medical School.

**Dr. Jewel is affiliated with Montclair Radiological Associates. Correspondence may be addressed to Dr. Jewel, 445 Bloomfield Avenue, Caldwell, NJ 07006.

surrounding CSF and to image with a greater degree of disease sensitivity, respectively. With the Diasonics imaging system, spin echo data routinely are accumulated at 28 and 56 milliseconds (TE=28, TE=56).

DISCUSSION

MRI is superior to other imaging procedures to evaluate the brain, spinal cord, cancellous bone, and male and female pelvis.[21] While CT relies on a single parameter for image creation, MRI depends on multiple parameters including proton density, spin-lattice relaxation (T 1) time, spin-spin relaxation (T 2) time, and proton motion or flow.

With MRI, the entire brain, mesencephalon, pons, medulla, cerebellum, and spinal cord can be seen. In addition, the subarachnoid space, disc spaces, cancellous bone, and paraspinal soft tissues clearly are depicted. The anatomic configuration of the posterior fossa, cerebellar tonsils, clivus, and vertebral bodies are visualized exquisitely. It must be emphasized that these images are created without the use of intrathecal contrast, ionizing radiation, or intravenous contrast material.

Congenital anomalies, such as the Arnold-Chiari malformation, can be diagnosed. Congenital disc space fusion and other vertebral body anomalies are seen clearly. Inasmuch as the entire cord can be visualized, a tethered cord with or without a lipoma may be detected. In the case of a fatty tumor with its characteristic T 1 relaxation time, a tissue specific diagnosis may be rendered.

Degenerative diseases of the disc spaces are depicted clearly as evidenced by an alteration in the MRI signal in the intervertebral spaces. In fact, MRI depicting a normal disc space signal conclusively can exclude the presence of a nucleus pulposus herniation. Displacement of the spinal ligaments and disc material itself also is visualized. Hypertrophic osteoarthritic spurring, with or without thecal sac or cord compression, is well seen.

Traumatic conditions of the spinal cord can be seen as areas of increased MRI signal indicating cord edema, contusion, or hematomyelia. Post-traumatic syringomyelia is viewed exquisitely and the entire extent of the syrinx can be depicted. By altering certain imaging parameters, cystic tumors can be distinguished from cysts filled with cerebrospinal fluid.

Disc space infection is imaged as areas of abnormal decreased signal involving the cancellous bone of the vertebral bodies. Similarly, metastatic disease to the vertebrae is illustrated by areas of altered MRI signal.

Neoplastic conditions of the spinal cord are depicted by an alteration in both the cord contour as well as a distinct change in the MRI signal. The ability to perform repeated serial examinations of the spinal cord is particularly advantageous and the course of treatment can be evaluated readily.

As has been illustrated, MRI of the spinal cord, spinal canal, and surrounding tissues is a noninvasive means of diagnosing a significant array of spinal disorders. Without using ionizing radiation or intravenous or intrathecal contrast, detailed evaluation of these vital structures is performed easily. Serial studies can be undertaken without the need for repeated invasive studies. Indeed, the need for myelography has been

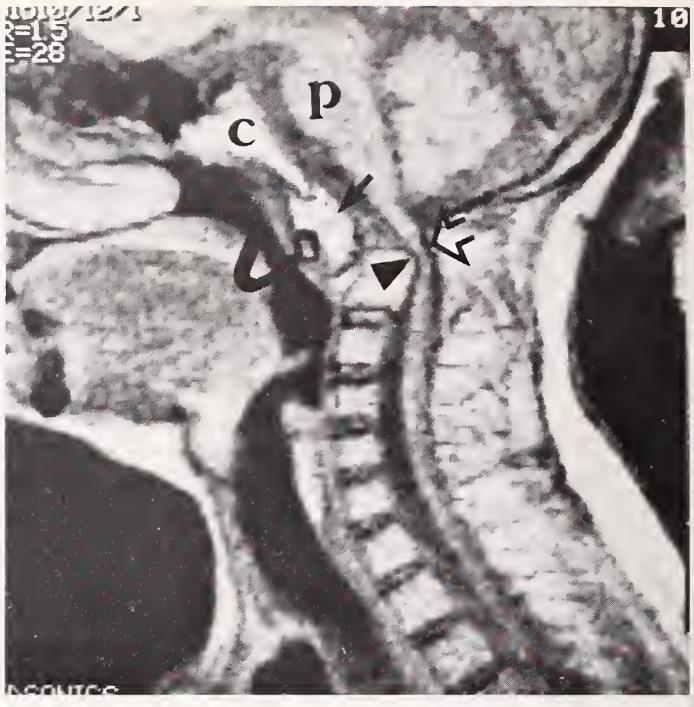


Figure 1—An example of marked cervical cord compression secondary to a bony spinal stenosis. The anterior arch of C 1 (curved arrow) and the odontoid process (solid arrow) are displaced forward while the posterior aspect of the body of C 2 (arrowhead) markedly compresses the upper spinal cord (open arrow). Increased MRI signal is seen in the clivus (c) and in the odontoid process as a result of normal fat within the marrow. Note the pons (p).

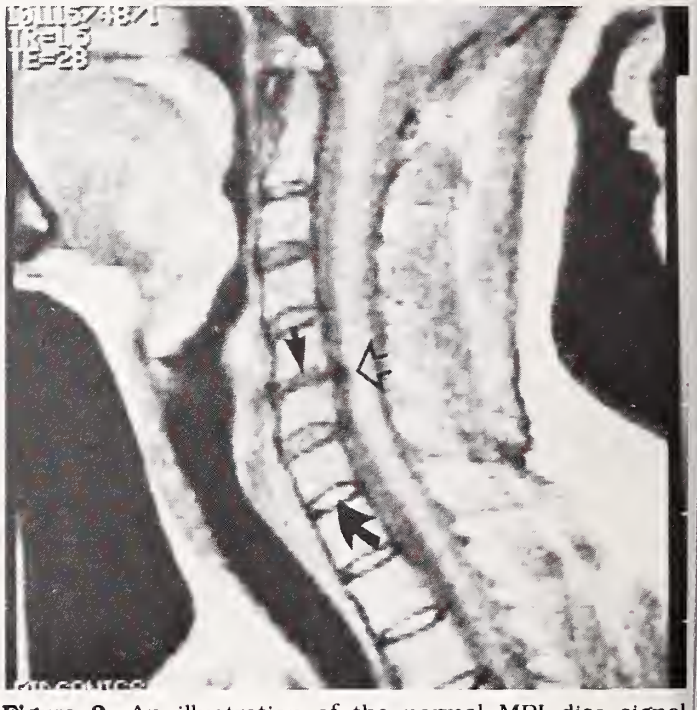


Figure 2—An illustration of the normal MRI disc signal (curved arrow) as well as an abnormal disc (arrow). The decreased MRI signal area (open arrow) indicated a cervical disc herniation and the encroachment upon the subarachnoid space is evident.

decreased significantly in our experience. At a time when all hospitals are struggling with the DRG prospective reimbursement system, this will prove to be an added benefit. In addition, because MRI imaging is pain and risk free,[22] patient acceptance has been great.

CONCLUSION

MRI of the brain is the screening procedure of choice in the diagnosis of intracranial pathology. A noninvasive means of evaluating spinal disorders now is

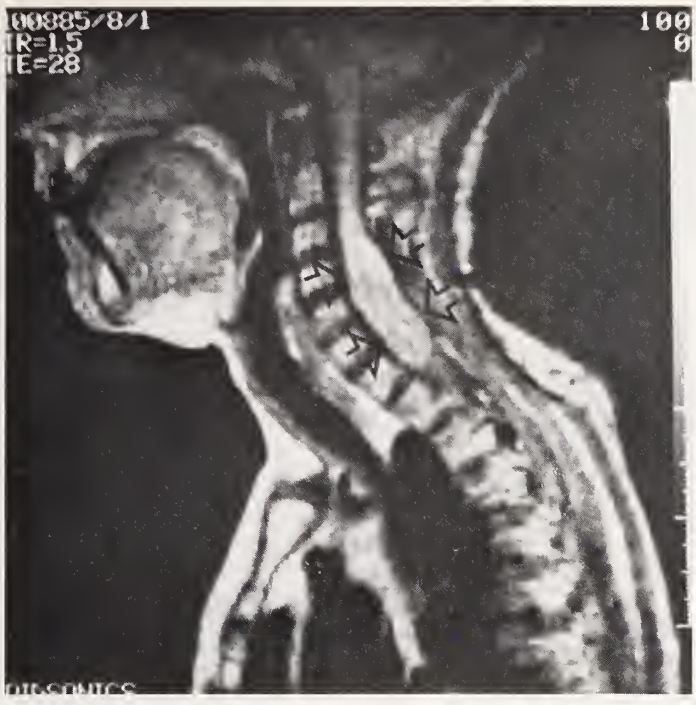


Figure 3—Open arrows show a large fusiform intramedullary spinal cord tumor. Abnormalities of contour and MRI signal clearly are noted.

available with MRI. Because of its excellent spatial resolution, unparalleled contrast resolution, and unsurpassed diagnostic sensitivity, MRI has become accepted as an excellent means to evaluate the neuraxis. Patient and physician acceptance has been great inasmuch as the examination is free of biological hazards,[22] does not require intrathecal or intravenous contrast material, does not utilize ionizing radiation, and can be repeated to follow the course of medical or surgical treatment. As a result of these exceptional imaging features, MRI has become the preferred screening procedure to evaluate the spinal cord.

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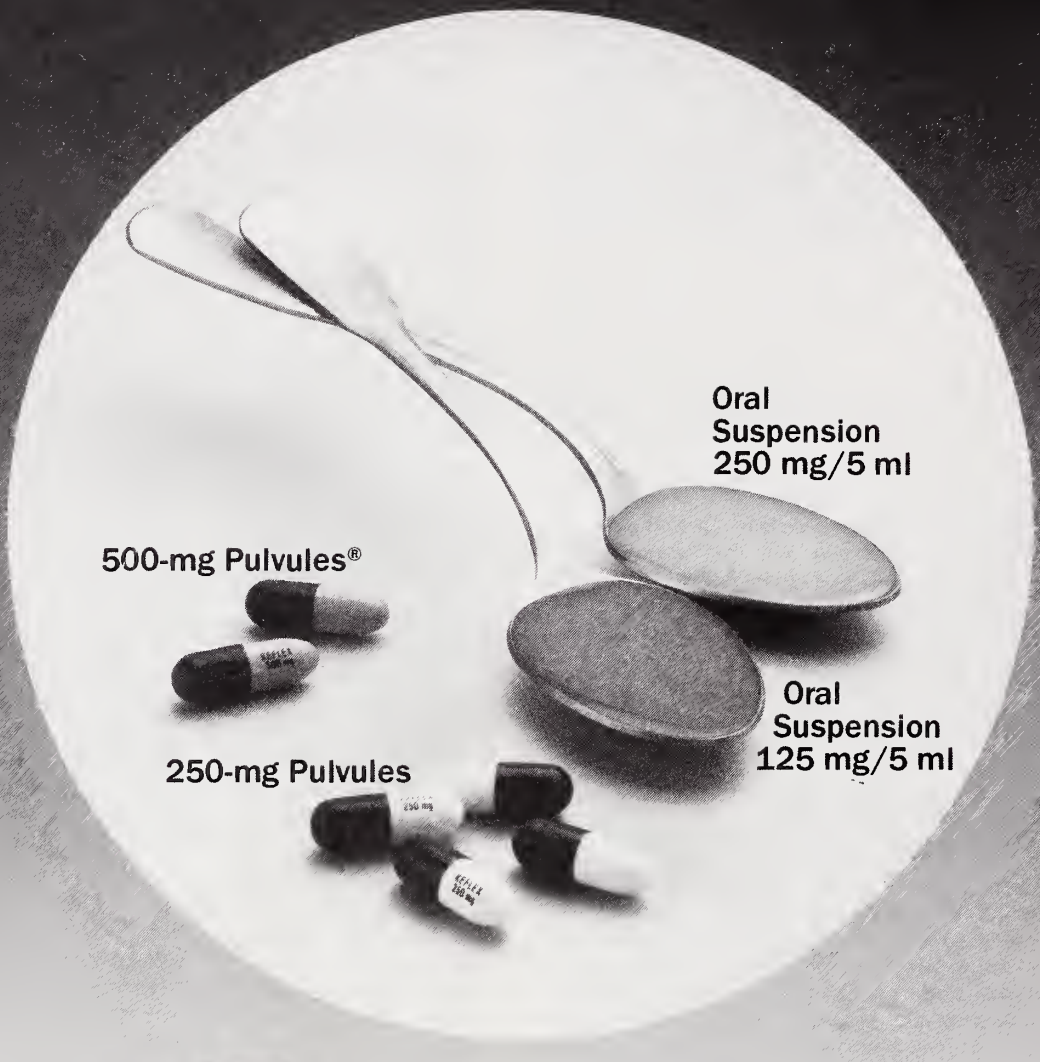
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COMMENTARY: CHILD ABUSE IN NEW JERSEY

AVRUM L. KATCHER, M.D., FLEMINGTON*

From 1982 to 1984, the number of reported cases of child abuse and child neglect has more than doubled. There is a toll-free number to call to report all suspected cases.

The number of reported cases of child abuse and child neglect in New Jersey has more than doubled from 1982 to 1984, reaching over 45,000 instances. Of this enormous number, 30 percent are substantiated after investigation by the Division of Youth and Family Services. One might speculate whether the increase is due to better recognition and reporting, but most observers feel that the explosive increase represents a worsening of the problem. More families are under stress than ever before.

The pertinent legislation, NJASA 9:6-8.10, has been in place since 1972. It states: "Any person having reasonable cause to believe a child has been subjected ... (including specific names and information) ... failure to do so shall be punishable as a disorderly person by a fine of not more than $500 and not more than six months in prison."

A professional need not search hard for more than reasonable cause. Anyone knowingly violating this law is subject to penalty. Neglect and malnutrition as well as sexual manipulation all are considered abuse under the legislation.

Other provisions authorize the physician or hospital to take into protective custody ("hospital hold") a child who has received serious injury when, by the most probable inference, that injury was inflicted by other than accidental means and the person suspected was the person to whom the child would be released if sent home.

Immunity to prosecutions, civil or criminal, is granted to persons reporting under this legislation.

Last year, a governor's task force with representatives of all relevant agencies was convened. Staff has been assigned full time to the problem in every county. Anyone desiring to report should call the statewide, toll-free number: (1-800)-792-8610.

It also is important to note that despite this dramatic increase, less than 1 percent of cases are reported from physicians' offices. A higher proportion, almost 50 percent of physician-reported cases, are substantiated, however. Physicians also are cautioned not to be discouraged if less than dramatic results are obtained in the management of this difficult problem.

The Medical Society encourages all physicians to be alert to this serious problem. It should be noted that the same agencies well may be involved with the enforcement of regulations under "Baby Doe" legislation when they have been completed.

*Dr. Katcher is Director, Pediatric Services, Hunterdon Medical Center, Flemington, and a member of the Editorial Board, *The Journal*, MSNJ.

DOCTORS' NOTEBOOK

Trustees' Minutes; UMDNJ Notes; AMNJ Report; Physicians Seeking Location in New Jersey

Trustees' Minutes March 17, 1985

A regular meeting of the Board of Trustees was held on March 17, 1985, at the Executive Offices in Lawrenceville. Detailed minutes are on file with the secretary of your county society. A summary of significant actions follows:

Albert F. Moriconi, M.D. ... Observed a moment of silence in tribute to the memory of Albert F. Moriconi, M.D., who died on February 19, 1985.

Report of the President . . .
(1) American Association of Retired Persons (AARP) ... Noted that MSNJ will work with the AARP Executive Committee on mutual goals.
(2) Commissioner's Special Committee on Health Issues ... Noted that the Health Care Financing Administration granted New Jersey a Medicare inpatient waiver, effective January 1, 1985, but still is considering whether to grant an outpatient waiver.

Report of the Executive Director . . .
(1) MSNJ 1985 Membership ... Noted that there were 5,671 dues-paying members at the close of February 1985.
(2) Review of MSNJ Financial Statements ... Reviewed and approved financial statements for the periods ending January 31 and February 28, 1985.
(3) Litigation—Subordinated Loan Certificate ... Noted that MSNJ should not consider further litigation unless the IRS appeals into the Federal Circuit Court.
(4) State of New Jersey Reinsurance Association Deficit ... Noted that to date, no decision has been made by the Insurance Commissioner regarding assessment to recoup the deficit of the Reinsurance Association.

UMDNJ . . .
(1) Blood Banking Task Force ... Noted that there is concern about the move to test all blood for AIDS and Dr. Bergen urged caution with the testing.
(2) Hospitals and Indigent Care ... Noted that interest is being given to hospitals that serve a disproportionate share of indigent patients by the federal government in the implementation of Medicare cuts because of financial difficulties.

NJ Hospital Association . . .
(1) Medicare Freeze ... Noted that if the freeze is instituted, New Jersey will be responsible for insuring the financial obligations of the hospitals.
(2) Hospital-Based HMOs ... Noted that the NJHA has indicated an interest in the development of an HMO.

Council on Medical Services . . .
(1) Corporate Restructuring of Hospitals ... Approved the following recommendation:

That the Board of Trustees once again notify the Commissioner of Health, the New Jersey Hospital Association, and the Governor of the Society's position on the corporate restructuring of New Jersey hospitals, with the request that steps be taken to effect a change.

(2) DEA Numbers on Medication Labels ... Approved the following recommendation:

That the Board of Trustees forward a letter to the New Jersey State Board of Pharmacy protesting the availability of the physician's DEA number on prescription labels.

(3) Relative Value Guidelines ... Requested a copy of a report from Legal Counsel when available on relative value guidelines.
(4) Physician Reimbursement in Rehabilitation Hospitals ... Advised that Mr. Maressa will continue to meet with Legal Counsel for the Society of Physical Medicine and Rehabilitation in Washington, D.C., and the overall topic of Medicare reimbursement will have to be resolved at the national level.

Council on Public Health . . .
(1) Oncology Society of New Jersey ... Disapproved the following recommendation but instructed MSNJ staff to identify oncologists and make that information available to the Oncology Society:

That physicians in the state who are involved in tumor work be identified and urged to join the Oncology Society of New Jersey.

(2) Laetrile ... Approved the following recommendation:

That the New Jersey legislature be requested to revoke the legalization of laetrile, since the drug has proved ineffective in the treatment of cancer and its use may be harmful to the welfare of patients either by delaying appropriate treatment or by causing cyanide toxicity.

Committee on Medicaid ... Did not approve the endorsement of the Medicaid Personal Physician Plan. Also, voted to refer the subject of capitation to the Council on Medical Services for study and recommendation.

Old Business . . .
(1) Palma E. Formica, M.D. ... Noted that Dr. Formica's candidacy for election to the AMA Board of Trustees was endorsed.
(2) DRG Position ... Noted that a meeting of the Ad Hoc Committee on Presentation of MSNJ DRG Position has been scheduled.
(3) 1985 Scientific Session Program ... Noted that the program at the Annual Meeting, developed by Doctor Watson, is "Appropriate Medical Care in the Last Year of Life."
(4) PRO of New Jersey, Inc. ... Noted that at a recent meeting of the Board of Trustees of the PRO of New Jersey, a new Norms, Standards and Criteria Committee was formed, and

that Arthur Krosnick, M.D., has been appointed to that Committee.

New Business . . .

(1) *The Journal*. . . Extended congratulations to *The Journal* for its first-place award in the Annual Medical Journalism Competition conducted by Sandoz Pharmaceuticals.

(2) JEMPAC Political Forum . . . Noted that the speaker for the JEMPAC Forum at the Annual Meeting will be Congressman Hal Daub from Nebraska, addressing the topic of health care prospectives from the 99th Congress.

Correspondence . . .

Medicaid Reimbursement for Immunizations . . . Noted that George J. Albanese, Commissioner of Human Services, has authorized the Medicaid program to proceed with the implementation of proposed fees (fees are published in the *New Jersey Register)*

UMDNJ Notes

Stanley S. Bergen, Jr., M.D.
President

The establishment of the Sammy Davis Jr. National Liver Institute on UMDNJ's Newark campus promises to make an exciting and dramatic contribution to the growth of New Jersey's health sector. Plans for the Institute include units for ambulatory care, education, nutrition, immunology, molecular biology, genetics, alcoholism, drugs, pathobiology, applied therapeutics, and metabolism. Special attention will be given to the use of computers in diagnosis and treatment.

The creation of the Institute was inspired by Carroll M. Leevy, M.D., an internationally recognized liver specialist who is professor and chairman of the department of medicine, UMDNJ-New Jersey Medical School, and Herbert Henderson, M.D., of Long Beach, California, who became familiar with Dr. Leevy's work and took an interest in expanding it. During the early stages of development, Dr. Leevy will serve the dual roles of board chairman and executive director of the Institute. As a consultant and widely sought-after speaker, Dr. Leevy has an unsurpassed knowledge of the impact of liver disease in underdeveloped countries and the growing incidence in the western world. A comprehensive, freestanding institute is a natural progression for his liver programs.

Sammy Davis Jr. has agreed to lend the Institute his name, and other prominent figures in entertainment and public service are ready to join him in supporting this venture, which we expect to become a center for patient care, education, and research dedicated to the conquest of liver diseases. A capital fundraising drive to obtain the resources needed for the Institute to attain its goals will include entertainment events, corporate gifts, and personal donations.

The charter class of UMDNJ-New Jersey Medical School will celebrate its 25th Silver Anniversary Reunion with special events on Friday, May 10, and Saturday, May 11. The annual Jegher's Lecture, a regular feature of the NJMS Alumni Association's activities, will be held at 11:30 A.M. Friday, May 10, in the Medical Science Building, Newark campus. Edmund D. Pellegrino, M.D., director of the Joseph and Rose Kennedy Institute of Ethics, Georgetown University, will be the guest lecturer on the topic, "Humanism and the Education of the Physician." At the Silver Anniversary Dinner Dance, which begins at 7 P.M. Saturday, May 11, in the Somerset Hilton in Somerset, Honorary Membership in the Medical Alumni Association of UMDNJ-New Jersey Medical School will be presented to Governor Thomas H. Kean and the four former living governors of New Jersey—Brendan T. Byrne, William T. Cahill, Richard J. Hughes, and Robert B. Meyer.

The advanced technology that has transformed the practice of medicine in recent years has led UMDNJ and Rutgers, the State University to offer a joint Ph.D. degree in biomedical engineering.

The growing sophistication of biomedical engineering has opened up new employment opportunities and new interest among students. The joint biomedical engineering program of UMDNJ and Rutgers University has grown from a handful of students 15 years ago to more than 60 today. Areas of study include heart assist devices, balloon pumps, improved ultrasonic imaging systems, implants, CT scanners, and other computer-assisted equipment for diagnosis and therapy. The faculty for the biomedical engineering doctorate will draw from both UMDNJ and Rutgers University. This will be the seventh joint doctoral degree program offered by the state's two public universities. Others are pharmacology, toxicology, zoology/anatomy, biochemistry, microbiology, and physiology.

The Robert Wood Johnson Foundation has approved a four-year $224,100 grant to continue programs for increasing the enrollment and achievement of minority students at UMDNJ. We are proud of the performance of our schools in minority recruitment and retention, which have given UMDNJ national prominence in this endeavor. Our overall minority enrollment is more than 20 percent, well above the national average, and 85 percent of the minority students admitted since 1976 either have graduated or still are enrolled. UMDNJ constantly is searching for minority students who show promise of succeeding in medical or dental education.

AMNJ Report

Robert S. Rigolosi, M.D.
President

Plans are proceeding for The Academy of Medicine's Annual Awards Dinner to be held at the Chanticler in Short Hills for the 12th consecutive year on Wednesday, May 29, 1985. Fellows of the Academy, friends, families, and colleagues will join us to honor the achievements of our Award recipients, and to install formally our new officers.

For the second consecutive year the Academy has commissioned an original work of art by a noted New Jersey artist which will be distributed to guests at the dinner. Mrs. Sue Bergen is preparing a depiction of the New Jersey Palisades overlooking the Hudson River.

As previously announced, Dr. Stanley S. Bergen, Jr., will receive the Edward J. Ill Award for his leadership in medicine. Mrs. Mary Mulholland will receive the Citizen's Award for her fundraising efforts on behalf of a multitude of causes.

New officers to be installed at the dinner are: Dennis Filippone, M.D., President; Arthur Krosnick, M.D.,

President-Elect; Anthony Minnefor, M.D., First-Vice President; and Benjamin F. Rush, Jr., M.D., Second Vice-President. Dr. George Triebenbacher will serve as Secretary, and Dr. E. Charles Eckstein will serve as Treasurer for the forthcoming year.

The Academy sponsored several major symposia. A symposium on "Obstetrical and Perinatal Ultrasonography" was held on Saturday, March 23, 1985, at the Sheraton Inn-Newark Airport in cooperation with the New Jersey Institute of Ultrasound in Medicine. On Wednesday, March 27, 1985, we cosponsored a symposium on "Substance Abuse in the Professions." Dr. Daniel Greenfield was program chairman. On Wednesday, April 10, 1985, we held a major symposium on "Cult Update: 1985" at the Englewood Hospital in Englewood. Dr. Harold Scales was program chairman. The 10th Annual New Jersey Orthopaedic Symposium was held on April 12 and 13, 1985. On Friday afternoon there was a "Conference on Complications in Orthopaedic Surgery," chaired by three guest professors. Dinner at the Hyatt Regency Hotel in New Brunswick featured Congressman Robert Toricelli as guest speaker. The symposium on Saturday, April 13, 1985, was held at Rutgers Medical School. The Academy's last First Wednesday program of the season was held on Wednesday, April 3, 1985. The topic "Political Action for Physicians" was addressed by Assemblyman Martin Herman and Dr. Frank Watson moderated the session.

Physicians Seeking Location in New Jersey

The following physicians have written to the Executive Offices of MSNJ seeking information on possible opportunities for practice in New Jersey. The information listed below has been supplied by the physician. If you are interested in any further information concerning these physicians, we suggest you make inquiries directly to them.

ALLERGY—Noah Barysh, M.D., 603A Old Nassau Rd., Jamesburg, NJ 08831. Chicago 1933. Board certified. Part time, 15 hrs/wk. Available.

ANESTHESIOLOGY—Howard Yap Ang, M.D., 2957 Decatur Ave., Apt. C-43, Bronx, NY 10458. Far Eastern University 1976. Board eligible. Solo, partnership, group. Available.

John James, M.D., 950 49th St., Apt. 8K, Brooklyn, NY 11219. G.S. Medical College 1978. Solo, partnership, fee for service, group. Available.

CARDIOLOGY—Bruce Klein, M.D., 438A Willow Turn, Mt. Laurel, NJ 08054. SUNY-Downstate 1977. Also, pediatrics. Board certified (PD). Group, HMO, hospital. Available.

DERMATOLOGY—Rami Ephraim Geffner, M.D., 1139 N. Church St., Apt. A-3, Greensboro, NC 27401. UMDNJ 1979. Group, solo, partnership. Available.

FAMILY MEDICINE—Shahida Asifudin, M.D., 902 47th St., #LB5, Brooklyn, NY 11219. Osmania (India) 1976. Group, partnership, solo. Available.

Bruce A. Blumenthal, M.D., 5813 Berkeley Ave., Baltimore, MD 21215. George Washington 1978. Board certified. Group or partnership. Available July 1985.

Mark T. Bright, M.D., 1718 Afton Ave., Charleston, SC 29407. Georgetown 1978. Board certified. Group or partnership. Available September 1985.

Steven Luke, M.D., 3246 Abell Ave., Baltimore, MD 21218. SUNY 1982. Board eligible. Group or HMO. Available July 1985.

GASTROENTEROLOGY—Pravin N. Patel, M.D., 15 St. Andrew's Pl., #25, Yonkers, NY 10705. Baroda (India) 1974. Also, internal medicine. Board certified (IM). Group, partnership, solo. Available July 1985.

INTERNAL MEDICINE—Yvonne D'Souza, M.D., 315 Ave., C, #7C, New York, NY 10009. Topiwalla National (India) 1972. Board eligible. Partnership. Available September 1985.

Kathleen A. Gaioni, M.D., 8 Park Dr. West, West Orange, NJ 07052. UMDNJ 1982. Board eligible. Solo. Available July 1985.

Frederic M. Heitzer, M.D., 3rd Ave., 160B Borden Apts., Long Branch, NJ 07740. UMDNJ 1982. Group, partnership, clinic, industry. Available July 1985.

Marvin H. Lerner, M.D., 233 E. 32 St., #4J, New York, NY 10016. Universidad Autonoma (Mexico) 1982. Board eligible. Group, partnership, solo. Available July 1985.

James C. McVeety, M.D., 713 South Birch Ave., Marshfield, WI 54449. Bologna 1975. Also, neurology. Board certified (IM); board eligible (N). Group, partnership, solo. Available.

Surendra K. Nevatia, M.D., 21 Heywood St., #2E, Worcester, MA 01604. Mahatma Gandhi Memorial (India) 1976. Solo, group, partnership. Available July 1985.

Pravin N. Patel, M.D., 15 St. Andrew's Pl., #25, Yonkers, NY 10705. Baroda (India) 1974. Also, gastroenterology. Board certified (IM). Group, partnership, solo. Available July 1985.

Mohamed Salem, M.D., 44 S. Munn Ave., East Orange, NJ 07018. Al Azhar (Egypt) 1977. Also, nephrology. Solo, group, clinic, hospital. Available June 1985.

Jason Weiner, M.D., 10 Dwight St., Poughkeepsie, NY 12601. Guadalajara 1980. Board eligible. Group or partnership. Available.

Joseph M. Weisgras, M.D., 160 West End Ave., Apt. 14E, New York, NY 10023. Juarez (Mexico) 1981. Board

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Name _____

Address _____

_____

eligible. Group, partnership, associate, solo. Available.

NEPHROLOGY—Mohamed Salem, M.D., 44 S. Munn Ave., East Orange, NJ 07018. Al Azhar (Egypt) 1977. Also, internal medicine. Solo, group, clinic, hospital. Available June 1985.

NEUROLOGY—James C. McVeety, M.D., 713 South Birch Ave., Marshfield, WI 54449. Bologna 1975. Also, internal medicine. Board eligible (N); board certified (IM). Group, partnership, solo. Available.

OBSTETRICS/GYNECOLOGY—Ian J. Gluck, M.D., 269-03R Grand Central Pkwy., Floral Park, NY 11005. New York Medical College 1979. Board eligible. Group or partnership. Available July 1985.

ORTHOPEDICS—Andrew R. Goldstein, M.D., 27 High St., Apt. 3E, Orange, NJ. UMDNJ 1980. Board eligible. Group or partnership. Available July 1985.

PATHOLOGY—Yury Kogan, M.D., 60 Egmont St., Brookline, MA 02146. Second Moscow Medical Institute 1967. Board certified. Group or partnership. Available.

Adam G. Lang, M.D., 1436 Armacost Ave., Apt. 9, Los Angeles, CA 90025. Illinois 1980. Group or partnership. Available July 1985.

PEDIATRICS—Bruce Klein, M.D., 438A Willow Turn, Mt. Laurel, NJ 08054. SUNY-Downstate 1977. Also, cardiology. Board certified. Group, HMO, hospital. Available.

Edgar Lyubling, M.D., 1401 Ocean Ave., Apt. 4H, Brooklyn, NY 11230. Moscow URSS 1967. Group or partnership. Available July 1985.

Boroumand Masood, M.D., 85-26 Van Wyck Expwy., Apt. 412, Briarwood, NY 11435. Tehran (Iran) 1968. Board certified. Group, partnership, solo, hospital. Available.

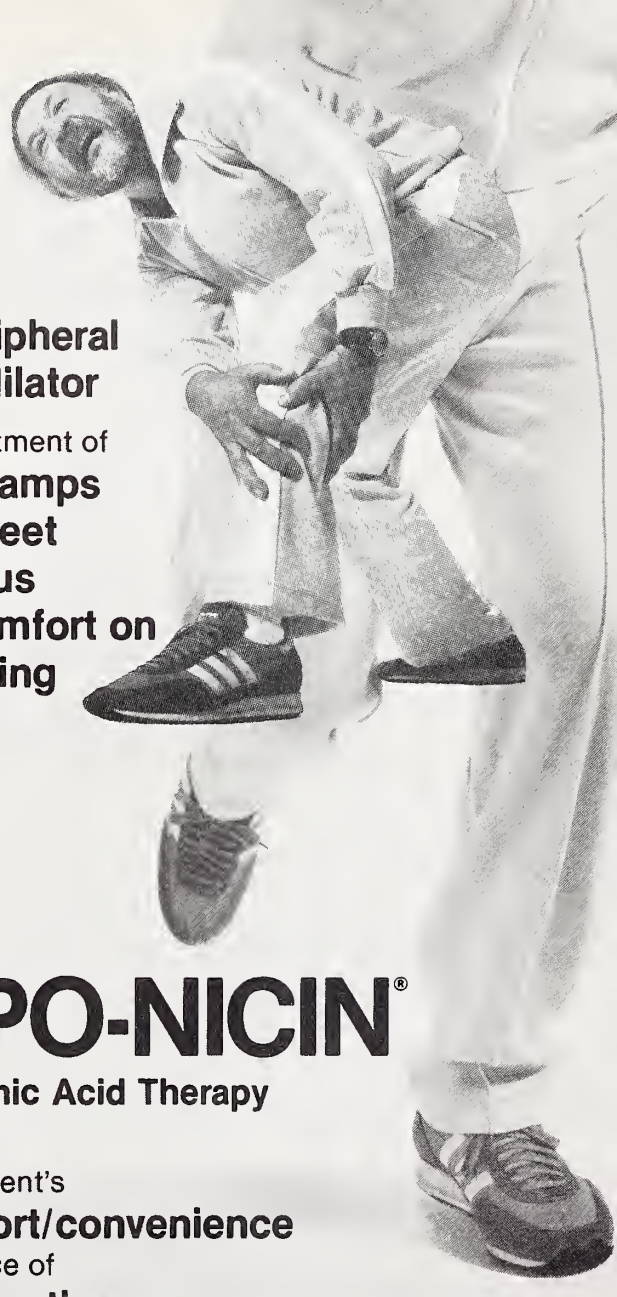
Pronoti Nigam, M.D., 24 Hart Blvd., Flemington, NJ 08822. Kanpur (India). Board eligible. Group or partnership. Available.

RADIOLOGY—Neil R. Kramer, M.D., 1000 Walnut St., Philadelphia, PA 19107. Temple 1980. Board eligible. Group or partnership. Available July 1985.

SURGERY—Nicholas G. Bonuicino, M.D., 130 W. 12 St., Apt. 5J, New York, NY 10011. New York Medical College 1979. Board eligible. Partnership or group. Available May 1985.

Naresh C. Nagpal, M.D., 323A Hayden St., Sayre, PA 18840. Maulana Azad (India) 1974. Board eligible. Solo, partnership, group. Available July 1985.

UROLOGY—Michael Bruce Kline, M.D., 3227 Jefferson Ave., #5, Cincinnati, OH 45220. Cincinnati 1980. Board eligible. Partnership or solo. Available August 1985.



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CITIZENS AWARD
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For further information, please contact:

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The Academy of Medicine of New Jersey
Two Princess Road
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(609) 896-1717

NEW JERSEY SOCIETY OF PATHOLOGISTS

ANNUAL SPRING MEETING

Saturday, May 18, 1985
at
UMDNJ-Rutgers Medical School
Piscataway, New Jersey
8:00 A.M.-2:00 P.M.
on
"MONOCLONAL ANTIBODIES: THEIR USE IN THE DIAGNOSIS OF NEOPLASTIC AND INFECTIOUS DISEASES"

Program Chairman: Elmer W. Koneman, M.D.
Associate Professor of Pathology
Northwestern University School of Medicine
Chicago, Illinois

REGISTRATION: Fee includes continental breakfast, coffee break, luncheon, and program
$15.00—Residents
$20.00—Members
$30.00—Non-Members

For Further Information Contact:

CATHY GILLMER
EXECUTIVE SECRETARY
NEW JERSEY SOCIETY OF PATHOLOGISTS
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THE ONCOLOGY SOCIETY OF NEW JERSEY and THE ACADEMY OF MEDICINE OF NEW JERSEY present

"Advances In Cancer Biology"

Saturday, May 11, 1985
UMDNJ-Rutgers Medical School
Piscataway, NJ
9:00 A.M.-12:20 P.M.

8:40 A.M.-9:00 A.M.	Registration and Continental Breakfast
WELCOME:	Harvey Rothberg, M.D.—President
INTRODUCTION:	Alex Haas, M.D.—Program Chairman
9:15- 9:55	ONCOGENES IN HUMAN NEOPLASIA Ilan Kirsch, M.D.
9:55-10:35	INTERFERON Howard Ozer, M.D.
10:35-10:55	COFFEE BREAK
11:00-11:40	MONOCLONAL ANTIBODIES Kenneth Foon, M.D.
11:40-12:20	NEW CONCEPTS IN RADIATION THERAPY Eli Glatstein, M.D.

There will be opportunity for questions and answers after each of the invited papers. CME credit given. No registration fee. For information, write or call:

The Oncology Society of New Jersey
Two Princess Rd., Lawrenceville, NJ 08648
(609) 896-1717

Registrations must be received by June 10, 1985 for:

MIAMI-NICE POSTGRADUATE COURSE: ADVANCES IN INTERNAL MEDICINE

NICE, FRANCE
June 23-28, 1985

Sponsored by: University of Miami School of Medicine and Universite de Nice, Faculte de Medicine

Course Directors: Jacques J. Bourgoignie, M.D. Laurence B. Gardner, M.D. Rene Masseyeff, M.D.

Lectures and workshops presented by faculty from the University of Miami School of Medicine and the Universite de Nice, Faculte de Medicine will concentrate on the underlying pathogenesis and mechanism of disease for specific internal medical disorders, indications and contraindications for treatment and specific complications which may result from therapy. Practical patient problems and management will be focused upon in workshop sessions.

Course Schedule: (Monday through Friday) Didactic presentations from 8:00 am to 1:00 pm. Workshop sessions from 6:00 to 8:00 pm.

Course Hours: 30 AMA Category 1 hours (6 hours per day)

Course Fee: $525 (US Dollars)

For information contact: Division of CME, University of Miami School of Medicine, P.O. Box 016960 (D23-3), Miami, FL 33101 Telephone: (305) 547-6716.

CME CALENDAR

The following is a list of continuing medical education courses for the next two months. Contact the sponsoring organization for further information.

This list is compiled through the cooperation of the Committee on Medical Education of the Medical Society of New Jersey, The Academy of Medicine of New Jersey, the New Jersey Chapter of the American Academy of Family Physicians, and the Office of Continuing Medical Education of the UMDNJ. For information on accreditation, please contact the sponsoring organization(s), indicated by italics—last line of each item.

ANESTHESIOLOGY

June

3, 10, 17, 24 **Anesthesia Lectures**
7 A.M.—Anesthesia Library, New Jersey Medical School, MSB-E545, Newark
(UMDNJ)

4, 11, 18, 25 **Anesthesia Lectures**
4 P.M.—Anesthesia Library, New Jersey Medical School, MSB-E545, Newark
(UMDNJ)

5, 12, 19, 26 **Anesthesia Grand Rounds**
4 P.M.—University Hospital, H350, Newark
(UMDNJ)

CARDIOLOGY

June

11 **Noncardiac Surgery in the Cardiac Patient**
12 noon—St. Mary's Hospital, Orange
(AMNJ)

14 **Pediatric Cardiology: 1985**
8-9:30 A.M.—Overlook Hospital, Summit
(Overlook Hospital and AMNJ)

28 **Cardiothoracic Journal Club**
7:30-11 P.M.
(UMDNJ)

MEDICINE

June

5, 12, 19 **Asthma and COPD**
1:30 P.M.—Essex County Hospital Center, Cedar Grove
(AMNJ)

5 **Annual Meeting: Ulcers**
2-5 P.M.—Morristown Memorial Hospital
(NJ Gastroenterological Society and AMNJ)

5, 12, 19, 26 **Medical Grand Rounds**
12 noon-1 P.M.—Rutgers, Medical Education Bldg., New Brunswick
(UMDNJ)

5, 12, 19, 26 **Rehabilitation Medicine**
4:15-5:15 P.M.—Kessler Institute, West Orange
(UMDNJ)

6, 13, 20, 27 **Nephrology Grand Rounds**
6:30-7:30 P.M.—Community Memorial Hospital, Toms River
(Community Memorial Hospital and AMNJ)

6 **Cancer in NJ: Epidemiologic Considerations**
11 A.M.—St. Joseph's Hospital and Medical Center, Paterson
(St. Joseph's Hospital and Medical Center and AMNJ)

6, 13, 20, 27 **Digestive Diseases II**
8-9 A.M.—New Jersey Medical School, MSB, Newark
(UMDNJ)

6, 13, 20, 27 **Allergy/Immunology Series**
11 A.M.-12 noon—United Hospital, ICN Conference Rm., Newark
(UMDNJ)

7, 21 **Renal Conferences in Nephrology**
4-5 P.M.—UMDNJ-Rutgers Medical School, Medical Education Bldg., Rm. 593
(Nephrology Society of NJ and AMNJ)

7, 14, 21, 28 **Department of Medicine Grand Rounds**
11:30 A.M.-1 P.M.—New Jersey Medical School, MSB-B610, Newark
(UMDNJ)

7 **Multidisciplinary Cancer Conference**
11 A.M.-12 noon—Wallkill Valley General Hospital, Sussex
(Wallkill Valley General Hospital and AMNJ)

7, 14, 21, 28 **Cancer Research Colloquium**
12 noon-1 P.M.—University Hospital, F467, Newark
(UMDNJ)

7, 14, 21, 28 **Urology Grand Rounds**
3-5 P.M.—New Jersey Medical School, MSB-B554
(UMDNJ)

10 **Oncology Update**
1-5 P.M.—Bridgeton Hospital
(Bridgeton Hospital and AMNJ)

17-18 **Today's Therapy in Nephrology**
8 A.M.-5 P.M.—Resorts International, Atlantic City
(Nephrology Society of NJ and AMNJ)

17-19 **11th W. Franklin Keim Memorial Seminar**
All day—Caesar's Boardwalk Regency Hotel, Atlantic City
(UMDNJ and Newark Eye and Ear Infirmary)

18 **IVP Conference**
5-7 P.M.—East Orange VA Hospital
(UMDNJ)

19 **Interhospital Rheumatology Rounds**
4:30-6 P.M.—University Hospital, I-355, Newark
(UMDNJ)

19 **Dermatological Conference**
6-9 P.M.—Rutgers Community Health Plan, 57 U.S. Hwy. 1, New Brunswick
(UMDNJ and AMNJ)

20 **Correct Use of Antibiotics**
5-7:30 P.M.—Somerset Medical Center, Somerville
(Somerset Medical Center and AMNJ)

July

3 **Use and Abuse of Pregnancy Tests**

17 **Common Skin Problems**
1:30-2:30 P.M.—Rutgers Community Health Plan, 57 U.S. Hwy. 1, New Brunswick
(Rutgers Community Health Plan and AMNJ)

4 **Nephrology Grand Rounds**
6:30-7:30 P.M.—Community Memorial Hospital, Toms River
(Community Memorial Hospital and AMNJ)

NEUROLOGY/PSYCHIATRY

June

3 **Post-traumatic Stress Disorder and Depression**
8:15-10:30 P.M.—1046 South Orange Ave., Short Hills
(Essex Psychiatric Seminar and AMNJ)

5 **Grand Rounds in Psychiatry and Mental Health**
10:30 A.M.-12 noon—New Jersey Medical School, MSB-B610, Newark
(UMDNJ)

5, 12, 19, 26 **Combined Autopsy and Surgical Pathology**
7-9:30 A.M.—University Hospital, Newark
(UMDNJ)

6 **Medical Illness Presenting as Psychiatric Syndromes**

13 **DSM III Pros & Cons; and Beyond to DSM IV**

20 **DRGs for the Private Psychiatric Hospital**
12 noon-1 P.M.—Carrier Foundation, Belle Mead
(Carrier Foundation)

6, 20 **Case Seminars**
8-10 P.M.—310 Harding Drive, South Orange

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(Advanced Psychiatric Group and AMNJ)

7 **Centralized Residency Training**
14 **Program and Psychiatric Lecture Series**
1:30-5 P.M.—Trenton Psychiatric Hospital
(Trenton Psychiatric Hospital and AMNJ)

17 **The Impact of Rape on the Family**
1-4 P.M.—Fair Oaks Hospital, Summit
(Fair Oaks Hospital and AMNJ)

17 **Lecture Series**
8:30-10:30 P.M.—301 Broad Ave., Englewood
(NJ Psychoanalytic Society and AMNJ)

18-19 **Humor/Play/Religion as Healing Powers**
9 A.M.-5 P.M.—Carrier Foundation, Belle Mead
(Carrier Foundation)

19 **Visiting Lectureship in Psychiatry**
10:30 A.M.-12 noon—New Jersey Medical School, MSB-B610, Newark
(UMDNJ)

19 **Psychiatry Lecture Series**
1-2:30 P.M.—Essex County Hospital Center, Cedar Grove
(UMDNJ)

July

11 **Usefulness of Antidepressant Plasma Levels and Cardiovascular Implications**

18 **Research Update: Aging, The Elderly, and E.C.T.**
11 A.M.-12 noon—Carrier Foundation, Belle Mead
(Carrier Foundation)

OBSTETRICS/GYNECOLOGY

June

7 **Annual Meeting**
9 A.M.-5 P.M.—Trump Plaza, Atlantic City
(NJ Obstetrical and Gynecological Society and AMNJ)

PATHOLOGY

June

6 **Clinical Pathology Conference**
13 11 A.M.-12 noon—New Jersey
20 Medical School, MSB-C555,
27 Newark
(UMDNJ)

6 **Pathology Experimental**
13 **Seminar Series**
20 12 noon-1 P.M.—New Jersey
27 Medical School, MSB-C555, Newark
(UMDNJ)

7 **Combined Autopsy and Surgical**
14 **Pathology**
21 7-9:30 A.M.—University Hospital,
28 Newark
(UMDNJ)

13 **Pathology Seminars**
12 noon-1 P.M.—New Jersey Medical School, MSB-C555, Newark
(UMDNJ)

PEDIATRICS

June

4 **Pediatric Grand Rounds**
8:30-9:30 A.M.—Newark Beth Israel Medical Center
(Newark Beth Israel Medical Center and AMNJ)

7 **Advances in Pediatrics**
14 9:30-10:30 A.M.—New Jersey
21 Medical School, MSB-B610,
28 Newark
(UMDNJ)

14 **Pediatric Cardiology: 1985**
8-9:30 A.M.—Overlook Hospital, Summit
(Overlook Hospital and AMNJ)

RADIOLOGY

June

12 **Radiology Grand Rounds**
26 4 P.M.—University Hospital, H350, Newark
(UMDNJ)

15 **Echocardiography Workshops**
16 9 A.M.-5:30 P.M.—Nassau Inn, Princeton
(Practical Diagnostic Ultrasound Seminars and AMNJ)

19 **CAT Scanning of the Abdomen: Part II**
1:30-2:30 P.M.—Rutgers Community Health Plan, 57 U.S. Hwy. 1, New Brunswick
(Rutgers Community Health Plan and AMNJ)

26 **CT Conference**
4-6 P.M.—University Hospital, H349, Newark
(UMDNJ)

SURGERY

June

1 **Surgical Morbidity and Mortality**
8 **Conference**
15 8:30-10 A.M.—New Jersey Medical
22 School, MSB-B610, Newark
29 *(UMDNJ)*

3 **Tumor Conference**
10 8-9 A.M.—University Hospital,
17 UH-H349, Newark
24 *(UMDNJ)*

3 **Surgical Grand Rounds/**
10 **Lecture Series**
17 4:30-5:30 P.M.—New Jersey
24 Medical School, MSB-B610, Newark
(UMDNJ)

4 **Surgical Grand Rounds**
25 7-9 A.M.—Hackensack Medical Center
(Hackensack Medical Center and AMNJ)

18 **Noncardiac Surgery in the Cardiac Patient**
12 noon—St. Mary's Hospital, Orange
(AMNJ)

25 **Diethylstilbestrol: Past, Present, and Future**
8-10 P.M.—Englewood Club, Englewood
(Englewood Surgical Society)

SURGICAL SPECIALTIES

June

1 **Surgical Treatment of Cardiothoracic Diseases**
10-11:30 A.M.—New Jersey Medical School, MSB-G506, Newark
(UMDNJ)

3 **Orthopedic Grand Rounds and**
10 **Lecture**
17 6-8 P.M.—New Jersey Medical
24 School, MSB-B556, Newark
(UMDNJ)

5 **Vascular Conference**
12 4-5 P.M.—New Jersey Medical
19 School, MSB-C600, Newark
26 *(UMDNJ)*

6 **Vascular Surgical Rounds**
13 4-5 P.M.—Medical Education Bldg.,
20 Rm. 593, Rutgers Medical School,
27 New Brunswick
(UMDNJ-Rutgers Medical School)

19 **Eye Institute Grand Rounds**
7-9 P.M.—United Hospital, Annex Bldg., Newark
(UMDNJ)

20 **Neurosurgery Lecture Series**
4-5 P.M.—University Hospital, E343, Newark
(UMDNJ)

MISCELLANEOUS

June

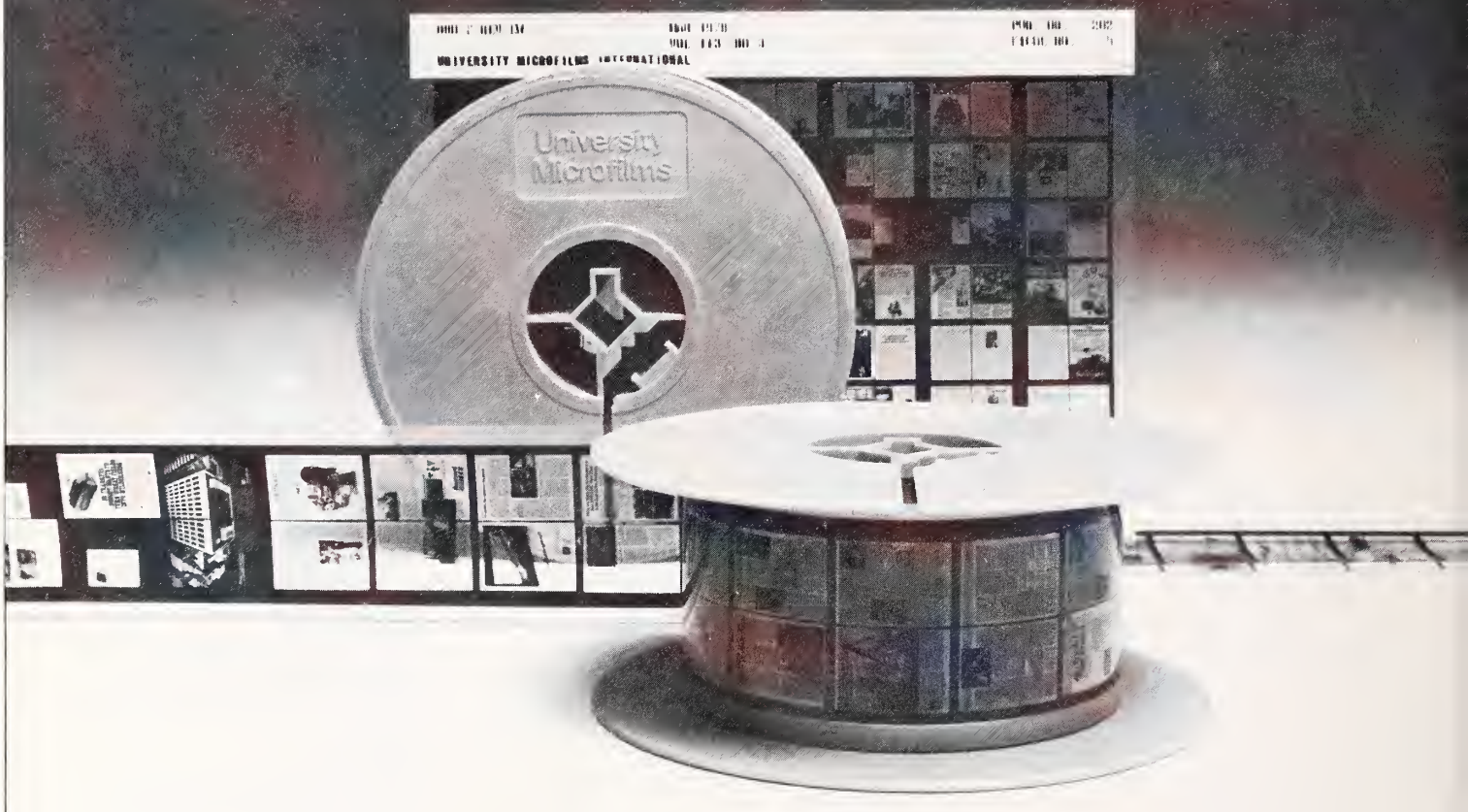
16 **Legal Aspects of Psychiatric Practice**
3 P.M.—Ancora Psychiatric Hospital, Hammonton
(AMNJ)

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Letter To The Editor

Gun Control Laws

February 5, 1985

Dear Doctor Krosnick,

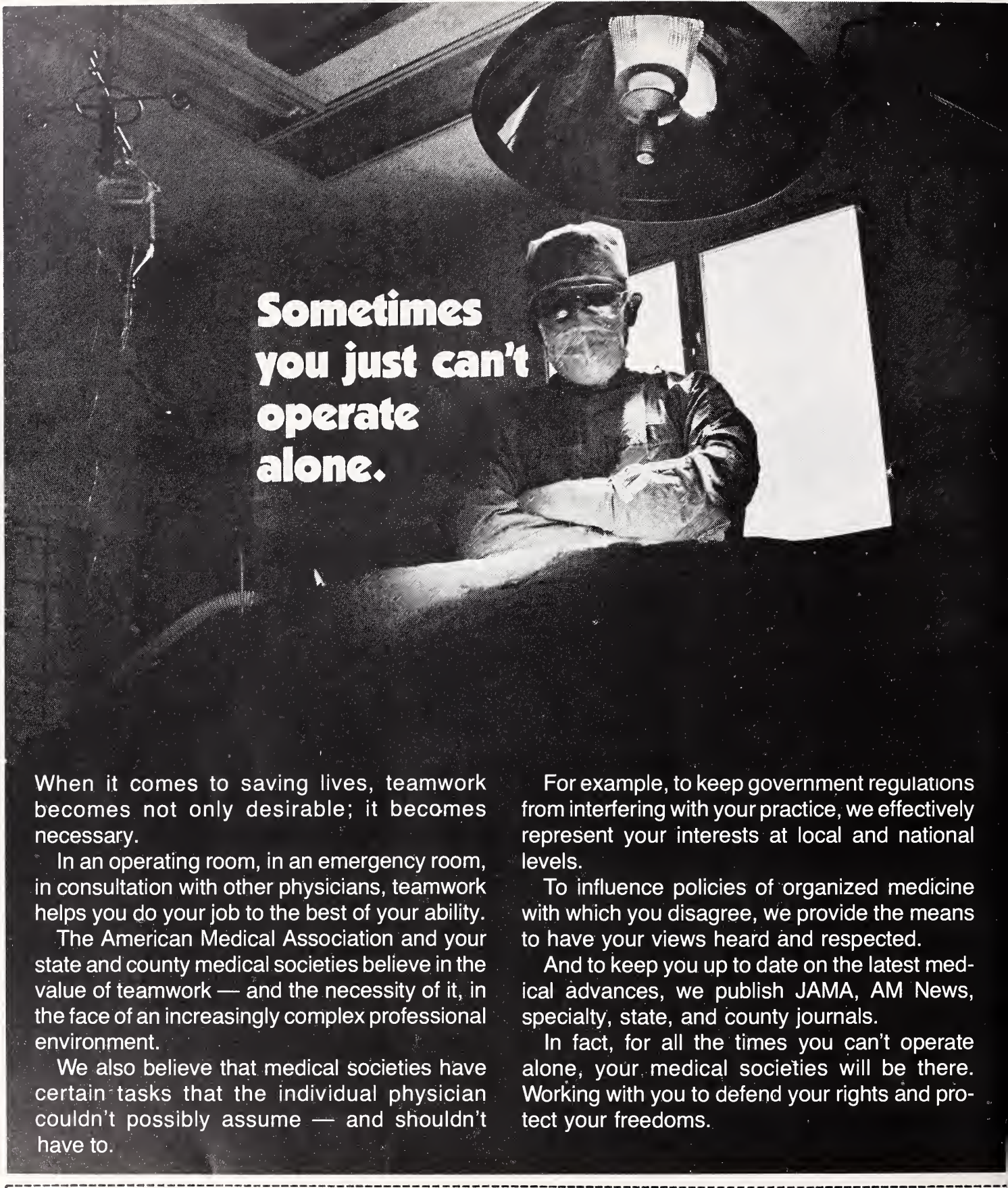
"The time has come," the walrus said, "to speak of many things ..." and so does Dr. Fennelly in his opinion published in *The Journal* (January 1985). His doggerel suggests sincere emotional distress over national violence and the recent defeat of the "ideas and ideals of the Democratic National Convention." Such distress may excuse Dr. Fennelly for the lack of substantiation to his arguments for "national gun control" but it does not excuse *The Journal* for publishing his statements in editorial form. Many, if not all, of his statements could be found in "Dear Abby" along with calls for stricter DRGs and suggestions that patients bill doctors for time spent in waiting rooms. To attack guns and gun ownership in such general terms is similar to the malpractice suit that includes all names found on a hospital chart. As we challenge such legal protocols, may I challenge Dr. Fennelly's statements.

Dr. Fennelly suggests that no national laws exist and that more are needed so that firearm-related violence can be as effectively controlled as automobile deaths. May I be allowed to wish that highway carnage and its toll in lives and injuries be reduced to the level of firearm injuries. Easy legal access to handgun ownership is a misconception. Laws do exist on both national and state levels. Their effectiveness varies with the public views of the laws and the courts' enforcement. When tribes "gathered," law was born. It was dispensed from strength and through fear. Leaders controlled the "public." That was the price of security. Our society, as doctors are acutely aware, is overcontrolled. Additional laws lead to disobedience. Many who wish to purchase a handgun in New Jersey already voluntarily wait many times the ten-day period stated in law to receive their permits. The state legislature now is considering a bill to raise the cost of permits by 1350 percent. National laws were designed to place individuals under control of local governments who are best suited to evaluate the individual's requirements. Physicians balk at national standards of care, why should we support other national standards? In New York City you are a criminal if Grandpa dies and you find he had a gun that was not registered. Turn it in, you're guilty. Keep it, you're guilty. Throw it away if you can, but hope you're not seen or that someone mentally ill doesn't find it.

Would more firearm laws protect the public? A family dispute in my not-impoverished neighborhood was ended with a carpenter's hatchet. We have read of disturbed persons driving their cars into crowds on hunting sprees no less productive than James Huberty, Dr. Fennelly's "victimizer." An attempt to lessen highway deaths at New Year by providing free public transit resulted in a rash of violence on the New Jersey subways due to inability to provide a legal presence. As a result, the program may be stopped. It is a shame that lives will be lost so that the politicians can avoid confronting an unpleasant situation. Recent evidence in New York and Chicago has indicated the individual's ability to protect himself when armed. A Supreme Court decision has stated the police are not legally obliged to provide protection to the individual. In view of the overall drop in New York subway crime after the Goetz incident, more individuals may arm themselves. If the laws are too restrictive, they will be ignored in favor of personal survival. Reasonable laws and enforcement will favor compliance and, in effect, better control.

Perhaps physicians should speak out. Dr. Fennelly's opinion has prompted me to do so. Violence is a disease and can be treated with the principals of isolation and quarantine of the violent. Let us not be fooled by the wonder drugs of politicians—more laws—no matter how high their ideals. More laws are society's quagmire, in whose stagnant waters breed the carriers of disease. Let us demand firmer enforcement of existing laws to isolate the ill so that society may gather without fear.

(signed) Robert J. Baran, M.D.



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Doppler Ultrasound in Cardiology; Invasive Cardiology; Acquired Immune Deficiency Syndrome

Doppler Ultrasound in Cardiology, Physical Principles and Clinical Applications, 2nd Edition

Liv Hatle, M.D., and Bjorn Angelsen (eds). Philadelphia, PA, Lea & Febiger, 1985. Pp. 331. Illustrated. ($30)

This volume, the second edition of a text, is a comprehensive introduction to cardiac Doppler ultrasound. The authors are recognized as responsible for many of the fundamental concepts and research in the field.

The current edition is aimed towards a more clinical application of the Doppler technique, and therefore much of the technical material found in the first edition has been omitted.

The book is divided into seven chapters. The first three chapters discuss the physics of blood flow and the basic principles of Doppler ultrasound techniques. This section is technical in nature, yet is written clearly and concisely. Each chapter starts with an introduction and an excellent list of references follows. The following three chapters are devoted to the clinical use of Doppler ultrasound in normal and various cardiac lesions such as obstruction to flow, valve regurgitations, hypertrophic cardiomyopathy, congenital lesions, pulmonary hypertension, and prosthetic valves. The strength of the book lies in this section which comprises the majority of the text and is correlated with catheterization data and frequent figures demonstrating cases described in the text. The final chapter describes the measurements of aortic blood flow to determine cardiac output. The application of this noninvasive method to estimate cardiac output is of considerable clinical importance. The figures in this current edition also combine two-dimensional imaging with Doppler measurement and greater emphasis is placed on the representation of complete spectral analysis of the Doppler signal, resulting in a clearer demonstration of the technique.

Overall, the book is current and well written and should be fundamental reading for both the cardiologist and technologist interested in Doppler ultrasound and its application to noninvasive cardiology.

Shale Gordon, M.D.

Invasive Cardiology

John Speer Schroeder (ed). Philadelphia, PA, F.A. Davis Co., 1985. Pp. 361. ($50)

The applications of catheterization techniques for the diagnosis and treatment of cardiac disorders has changed dramatically over the past ten years. Technologic advances have brought about a better understanding of pathophysiology while allowing newer forms of therapy not possible previously.

The objective of this book is to review selected subjects of invasive cardiology where recent advances have been made. There are 19 chapters and 33 authors.

The first three chapters discuss coronary arteriography including indications, techniques, morbidity, spectrum, and findings after acute myocardial infarction. There is a chapter on laboratory diagnosis of myocardial ischemia with excellent discussion of coronary sinus pacing and lactate studies. Provocative testing for coronary artery spasm, coronary angioplasty, and thrombolysis in acute myocardial infarction are reviewed extensively. A chapter on evaluation of myocardial function by invasive methods is somewhat spartan but has excellent figures and content. Three later chapters discuss electrophysiology and temporary pacing. The section on hemodynamic monitoring in the cardiac care unit is well written and timely. A companion topic is discussion of the percutaneous intraaortic balloon technique and application. Three additional sections deal with pericardiocentesis using echocardiography, interventional techniques in congenital heart disease, and current status of digital subtraction angiography.

This book represents a most comprehensive summary of the individual topics reviewed. The citations are current and the knowledge conveyed is on the cutting edge of current cardiologic principles and practice. This book is an excellent reference source for teaching at the resident and subspecialty level. The material covered is remarkably well organized with the majority of chapters quite easy to read despite the complexity of many of the topics. Viewed as a series of monographs, this book is a must for the cardiologist's reference library.

Robert M. MacMillan, M.D.

Acquired Immune Deficiency Syndrome

M.S. Gottlieb and J.E. Groopman. New York, NY, Alan R. Liss, Inc., 1984. Pp. 438. ($60)

Acquired immune deficiency syndrome (AIDS) is the most devastating and terrifying disease ever to attack man. This recently described entity is not even mentioned in today's textbooks. With the help of Schering Corporation-U.C.L.A. and Alan R. Liss of New York City, editors Michael S. Gottlieb and Jerome E. Groopman have produced a very impressive review of the AIDS epidemic including retroviruses, T-cell analysis, AIDS in Europe, comparative simian AIDS, Kaposi's sarcoma, cytomegalovirus, Epstein-Barr virus, cryptosporidium, and the role of immunoparalysis and interleukin II.

Although this book is outdated in certain aspects containing the promise of interleukin II, it includes all of the knowledge of this disease up to 1985. This is the best available book on the subject.

Leon G. Smith, M.D.

OBITUARIES

Drs. Beggs; Chase; Dailey; DeCicco; Drewniany-Killeen; Halpern; Moriconi; Pavia; Pflug; Ruttenberg; Sullivan; Summers; Ware

Dr. James L. Beggs

A neurosurgeon with offices in New Brunswick, James Lee Beggs, M.D., was dead on arrival at The Medical Center at Princeton, on February 12, 1985. Only 54 years of age, Dr. Beggs was born in Johnstown, Pennsylvania, and received his medical degree from the University of Pittsburgh School of Medicine, Pennsylvania, in 1956. Immediately upon graduation, Dr. Beggs established a practice first in Pennsylvania, moving to California in 1961, and finally settling in New Jersey in 1963. He became a member of our Middlesex County component, had been a member of the AMA, was board certified in his specialty, and was a Fellow of the American College of Surgeons. Dr. Beggs had affiliations with Middlesex General and St. Peter's Hospitals, New Brunswick; Raritan Valley Hospital, Green Brook; Somerset Hospital, Somerville; and The Medical Center at Princeton. He was clinical assistant professor of neurology at UMDNJ-Rutgers Medical School, and a consultant to the Carrier Foundation, Belle Mead, and Princeton University.

Dr. William M. Chase

A past member of MSNJ's Council on Public Health, William Milton Chase, M.D., died on January 22, 1985, at East Orange General Hospital. A native of Newark, and a lifelong resident there, born in 1920, Dr. Chase was graduated from Meharry Medical College, Tennessee, in 1947. An internist, he had served as medical director for the Newark school system for 15 years. Dr. Chase had been chief of the chest disease clinic at St. James Hospital, Newark, for 13 years. He also had been affiliated with East Orange General Hospital and had served as consultant to the New Jersey Rehabilitation Commission for almost 15 years. Dr. Chase was a member of our Essex County component and a member of the American Medical Association. During World War II he served in the medical department of the United States Air Force.

Dr. Edward S. Dailey

A retired member of our Sussex County component, Edward Sims Dailey, M.D., died in Desert Samaritan Hospital, Arizona, on January 10, 1985. A native of East Orange, born in 1909, Dr. Dailey received his medical degree from Temple University School of Medicine, Philadelphia, in 1938. He established a practice in general medicine in Franklin, where he remained until his move to Green Valley, Arizona, in 1980. Dr. Dailey's wife, Clara Evans Dailey, M.D., also a member of the Medical Society, preceded him in death, dying May 8, 1983.

Dr. John P. DeCicco

After a long illness, John Peter DeCicco, M.D., died at his home on January 26, 1985, at the untimely age of 47. Born in Summit, Dr. DeCicco received his medical degree from New York Medical College in 1962, and for the past 19 years had served the Freehold area as a practitioner of general medicine. He was a member of our Monmouth County component, and had been affiliated with the Freehold Area Hospital and Jersey Shore Medical Center, Neptune. Dr. DeCicco was a Fellow of the American Academy of Family Practice.

Dr. B. Drewniany-Killeen

Still active in the practice of family medicine, Bernardine P. Drewniany-Killeen, M.D., died at Clara Maass Medical Center, Belleville, on January 26, 1985, at the age of 71. A native of Taunton, Massachusetts, Dr. Drewniany-Killeen received her medical degree from Tufts University School of Medicine, Boston, in 1940. She had been affiliated with Clara Maass Medical Center; Presbyterian Hospital, Newark; and Saint Barnabas Medical Center, Livingston. Dr. Drewniany-Killeen practiced medicine from her home in Lyndhurst for almost 40 years. She was a member of our Monmouth County component, and also a member of the AMA.

Dr. Sophia L. Halpern

Sophia Levinson Halpern, M.D., a family practitioner in West New York, died on December 19, 1984, at the venerable age of 92. Born in New York City, Dr. Halpern received her medical degree from the Eclectic Medical College, Cincinnati, in 1916. For many years her home in Union City was the setting for her office; in recent years she moved to the West New York location. She had been affiliated with North Hudson Hospital in Weehawken, and had been a member of our Hudson County component and also a member of the American Medical Association. In 1966, Dr. Halpern was a recipient of MSNJ's Golden Merit Award in recognition of having served 50 years as a physician.

Dr. Albert F. Moriconi

A well-known otolaryngologist who served the Trenton area for over 50 years prior to his retirement in 1983, Albert Francis Moriconi, M.D., died in St. Luke's Hospital, Houston, Texas, on February 19, 1985, at the venerable age of 83. A native of Trenton, Dr. Moriconi received his medical degree from the University of Maryland School of Medicine in 1926. He was an associate professor of ear, nose, and throat diseases at the Graduate School of Medicine of the University of Pennsylvania,

Philadelphia, for 22 years. He had been president of the medical staff, chief of the ear, nose, and throat department, and director of the hearing and speech center, all at St. Francis Medical Center, Trenton. Dr. Moriconi was active in Medical Society affairs, having been president of MSNJ's Judicial Council, and a member of the Ethics Committee. He was a member of our Mercer County component; a member of the American Medical Association; a Fellow both of the American College of Surgeons and the American Academy of Ophthalmology and Otolaryngology; and a Diplomate in his specialty. In 1976, Dr. Moriconi was a recipient of MSNJ's Golden Merit Award, honoring his 50 years as a physician.

Dr. John R. Pavia

The medical director for Public Service Electric and Gas Company for 32 years, prior to his retirement in 1973, John Richard Pavia, M.D., died in Saint Barnabas Medical Center, Livingston, on January 25, 1985. A native of Newark, born in 1906, Dr. Pavia received his medical degree from the University of Vermont College of Medicine, in 1931. He had been in private practice from 1932 to 1945 in East Orange. During World War II, Dr. Pavia was a Navy combat flight surgeon, and received three citations for services rendered at Okinawa, Guam, and Iwo Jima. In 1981, he was a recipient of MSNJ's Golden Merit Award, honoring his 50 years in medicine.

Dr. Ferdinand J. Pflug

At the remarkable age of 94, Ferdinand James Pflug, M.D., died on February 12, 1985, at the Masonic Home, Burlington. A native of Hoboken, Dr. Pflug served that community for over 50 years as an otolaryngologist. He had received his medical education at Jefferson Medical College, Philadelphia, and was graduated in 1914. He was a member of our Hudson County component, and a member of the American Medical Association. Dr. Pflug was a Fellow of the American Academy of Facial Plastic and Reconstructive Surgery. He had been affiliated with Christ Hospital, Jersey City, and St. Mary's Hospital, Hoboken. In 1964, MSNJ honored Dr. Pflug with its Golden Merit Award in recognition of his 50 years in medicine.

Dr. Max Ruttenberg

A retired otolaryngologist, Max Ruttenberg, M.D., died at Bryn Mawr Hospital, Pennsylvania, on January 18, 1985, at the venerable age of 92. Born in Russia, Dr. Ruttenberg and his parents emigrated to the United States, and he earned a medical degree from Temple University School of Medicine, Philadelphia, in 1922. He was already licensed to practice dentistry, and used that income to complete his medical studies. A member of our Camden County component, Dr. Ruttenberg had been an assistant professor at Graduate School of Medicine of the University of Pennsylvania and had been on the staff at both Graduate and Philadelphia General Hospitals, Philadelphia. Illness forced Dr. Ruttenberg to retire at 60 years of age.

Dr. Claude C. Sullivan, Jr.

We just have learned of the death on September 1, 1984, of Claude Clarence Sullivan, Jr., M.D., a retired member of our Camden County component. Born in Tuscaloosa, Alabama, in 1918, Dr. Sullivan received his medical degree from Hahnemann Medical College and Hospital in 1943. He practiced general medicine in Stratford until the mid-1970s when he went into partial retirement, dividing his time between Port Richey, Florida, and Surf City.

Dr. Alfred D. Summers

Alfred D. Summers, M.D., an obstetrician in Princeton for almost 50 years, died in Hamilton Hospital, Trenton, on February 4, 1985. Born in Indiana, in 1895, Dr. Summers received his medical degree from University of Michigan Medical School in 1925. He was a member of our Mercer County component, and a member of the American Medical Association, and had been affiliated with The Medical Center at Princeton. Dr. Summers had served in the ambulance corps in World War I. In 1975, he was a recipient of MSNJ's Golden Merit Award in honor of his 50 years in medicine.

Dr. Carl N. Ware

A past president of our Cumberland County and Cape May County components, Carl Nash Ware, M.D., died at Bridgeton Hospital on February 4, 1985, at the age of 70. A native of Millville, Dr. Ware received his medical degree from Hahnemann Medical College and Hospital, Philadelphia, in 1931. For nearly 40 years he served the communities of Shiloh and Ocean City as a general practitioner. Dr. Ware had been associate medical director for Prudential Insurance Company's government health programs office, Millville. He also had been chief of pediatric services at Bridgeton Hospital, and was the founder of their poison control center. Dr. Ware was affiliated with Shore Memorial Hospital, Somers Point, and had been chief of staff and director of pediatrics at Mercer Hospital, Sea Isle City. He had served on the Board of Trustees of MSNJ; was chairman of the Board from 1957 through 1959, and secretary during 1956 and 1957. In 1981, Dr. Ware was one of the recipients of MSNJ's Golden Merit Award, honoring his 50 years as a physician.

AUTHOR INFORMATION

Style Sheet

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CONTENT

The educational content of each issue appears as scientific articles, based on research, original concepts relative to epidemiology of disease, and treatment methodology; case reports based on unusual clinical experiences; review articles: clinical notes, succinct items on some aspect or new observation or technique of a case experience; and special articles, which include evaluations, policy and position papers, and reviews of nonscientific subjects. Other topics include commentary (critical narration); medical history; therapeutic drug information; pediatric briefs; nutrition update; and an opinion column. Editorials are prepared by the Editor and by guest contributors on timely and relevant subjects; editorials are the responsibility of the author. The Doctors' Notebook section contains organizational, informational, and administrative items from MSNJ and from the community. Letters to the Editor and book reviews are welcome and will be published as space permits. The principal aim in the preparation of a contribution should be relevance to diagnosis and treatment and to education of patients and professionals. Preference will be given to professional authors from New Jersey and to out-of-state lecturers who submit a suitable manuscript based on a presentation made in New Jersey.

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2. Dixon WJ, Massey FJ: *Introduction to Statistical Analysis.* New York, NY, McGraw-Hill, 1969, pp. 42-48.

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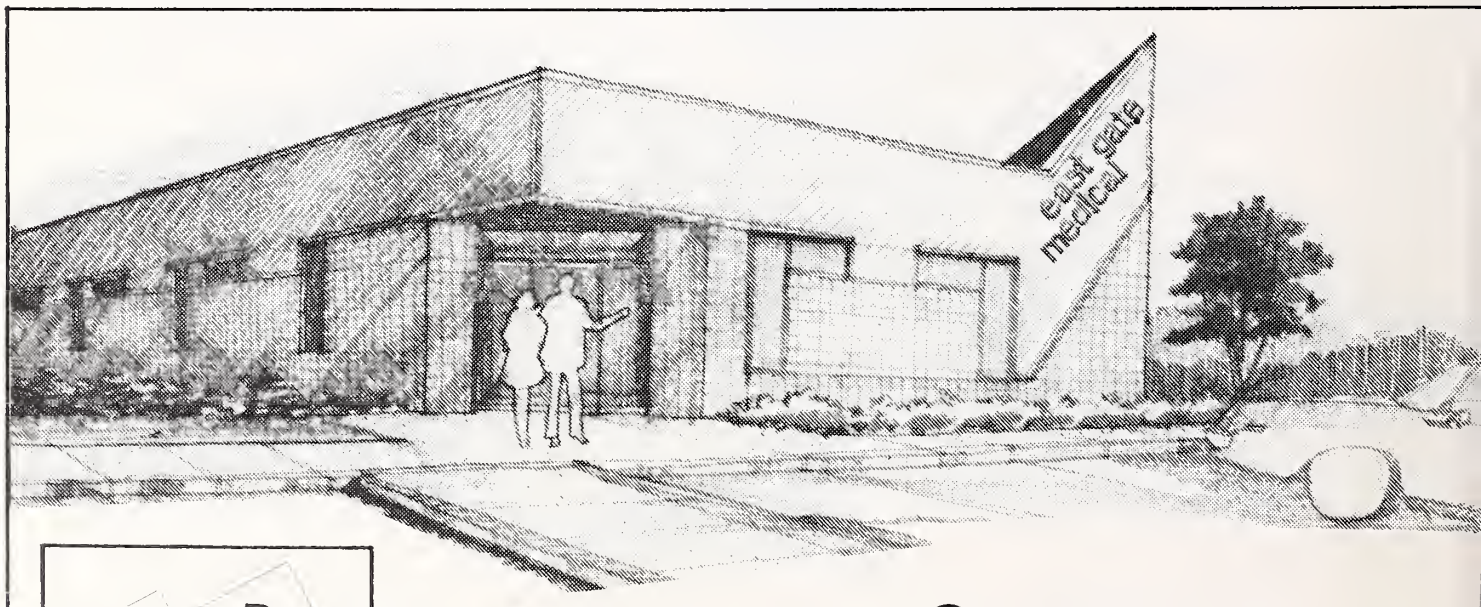
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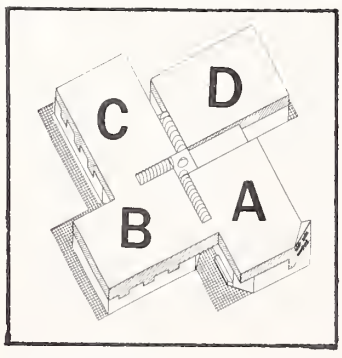
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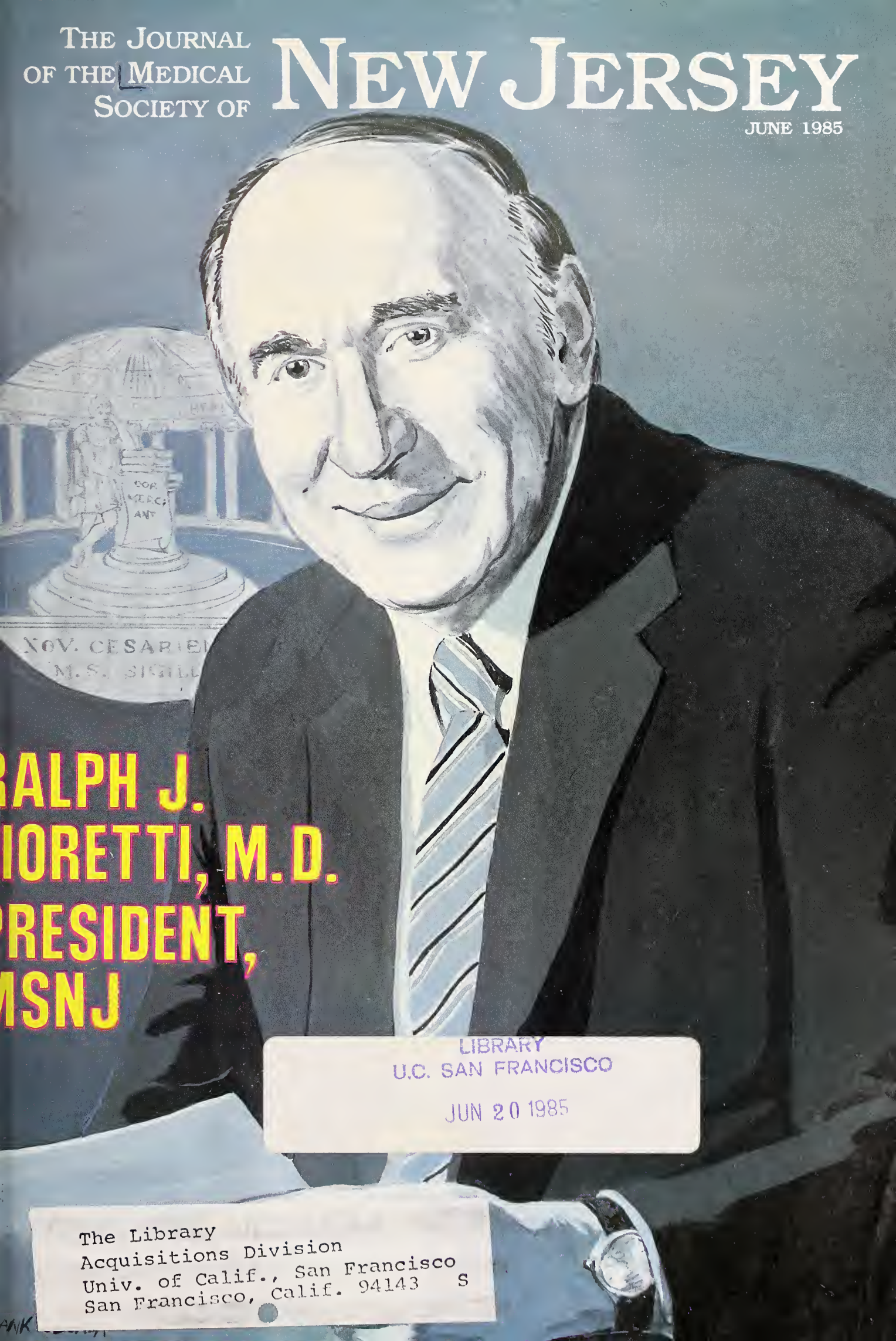
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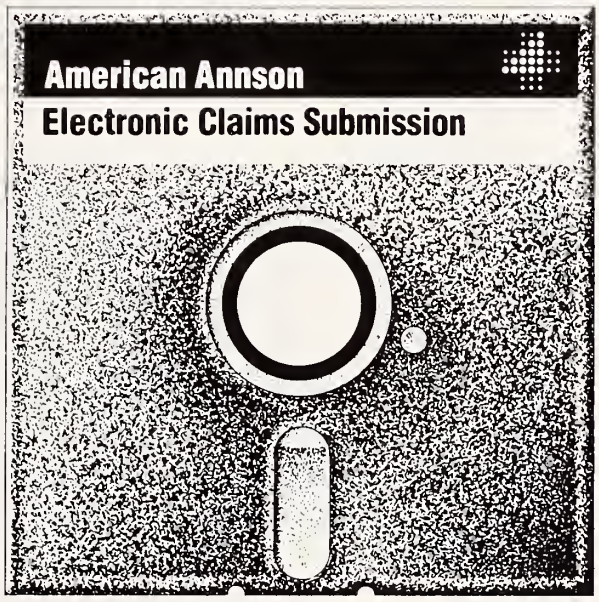
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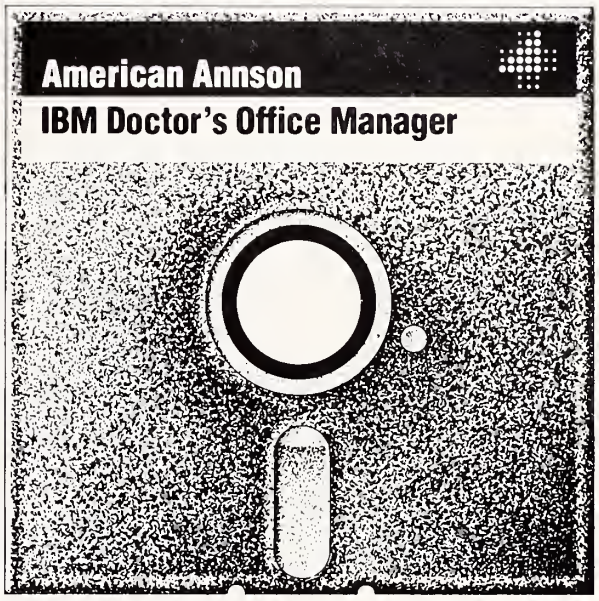
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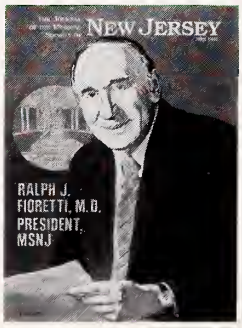
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On The Cover: Ralph J. Fioretti, M.D., is the 193rd President of the Medical Society of New Jersey. His inaugural address appears on page 447. Cover illustration by Frank Cecala.



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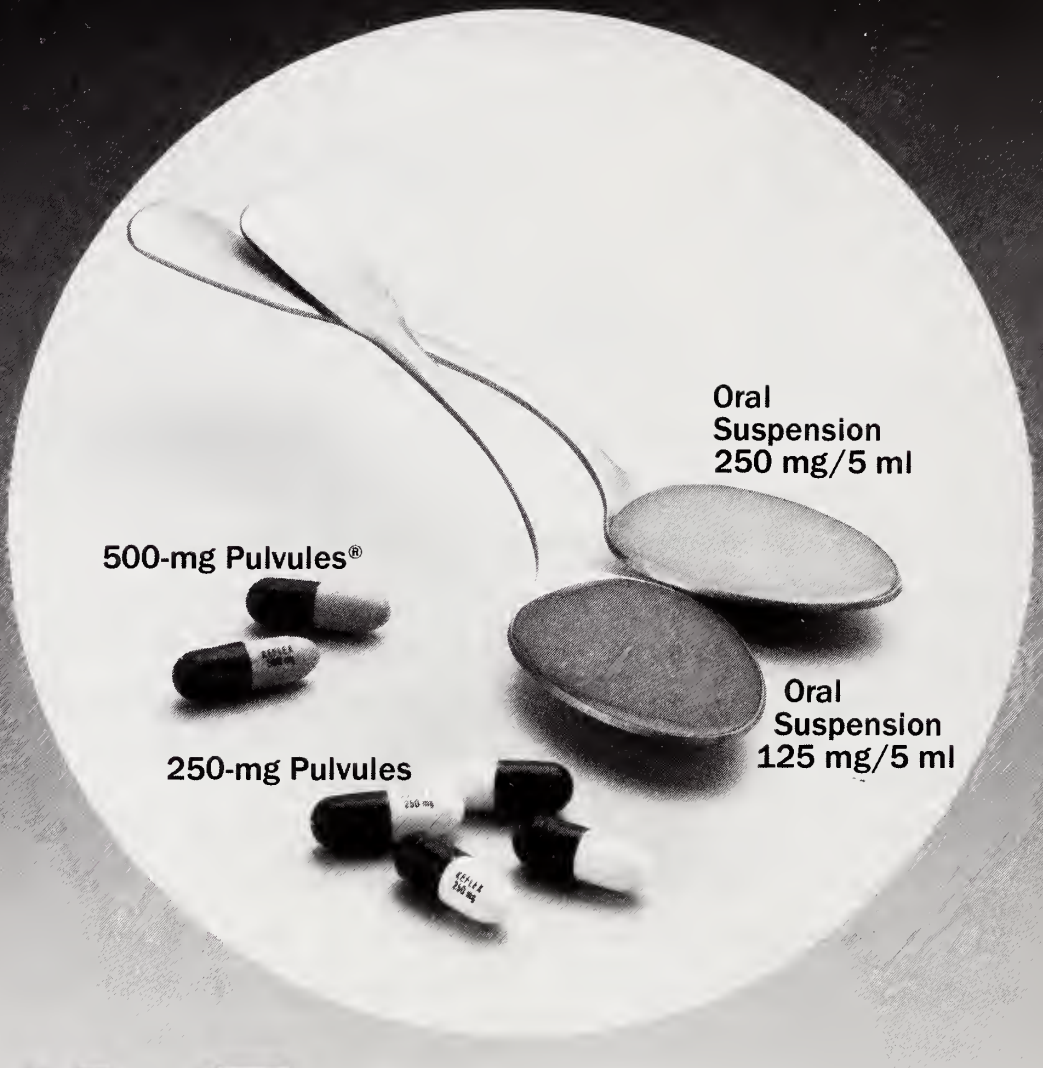
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MEMBERSHIP NEWSLETTER

MSNJ

THE MEDICAL SOCIETY OF NEW JERSEY VOLUME 23

MSNJ STATEMENT ON BLUE SHIELD FEE REDUCTION

The Medical Society of New Jersey has received a request from the Chairman of the Board of Blue Shield to urge Society members to reduce their fees to Blue Shield by 5 percent because of a large deficit in the Blue Shield Plan.

MSNJ does not know the nature and extent of the Blue Shield deficit but is aware that the financial base of the Plan has been eroding in the last few years.

Members of the Society engaged in a voluntary fee freeze for this past year. Additionally, the federal government froze payments to physicians under Medicare from October 1, 1984, to September 30, 1985. During this same time period the costs of goods and services necessary to physicians in their practices have risen unchecked. Malpractice insurance alone rose by over 24 percent.

Physicians cannot be expected to bear the cost overruns of the government or private industry. Likewise, MSNJ at this time cannot urge its members to reduce their fees to Blue Shield. That would give Blue Shield an unfair competitive advantage over other insurers and purchasers of care. It also should be noted that Blue Shield fees have been frozen for the past year.

The Blue Shield fee freeze coupled with the Medicare freeze has resulted in some physicians finding it difficult to continue treating Blue Shield and Medicare patients. A Blue Shield reduction can only exacerbate these problems since at present Blue Shield payments are based on 1982 charges.

The Society fully recognizes the importance of a sound Blue Shield Plan to the people of New Jersey and will do its best to resolve those issues it can. Until the details of the Blue Shield situation have been presented to the Society and analyzed, we cannot take action on the Blue Shield request.

PROFESSIONAL CONDUCT OF LICENSEES AND BUSINESS RELATIONSHIPS

The following is a letter sent to Charles A. Janousek, Executive Secretary, State Board of Medical Examiners, from Drs. Frank Watson and Ralph Fioretti:

The following comments are submitted to you in regard to the above matter pursuant to the notice published in the April 15, 1985, issue of the *New Jersey Register*. In that notice, the Board poses a number of sweeping questions and a printed amendment to the current prohibition of the kickback rule (N.J.A.C. 13:35-6.4).

1. The first question asked is whether a physician ethically may refer a patient to a separate entity which provides a separate and limited health care service if the physician has an ownership interest in and receives profits from that entity. Such a practice is currently common and acceptable, and is recognized as ethical by the AMA Judicial Council. We believe it would be appropriate for the referring physician to be required to disclose to the patient his ownership in the entity. Please remember that many hospitals require or urge attendings to refer patients for such services to hospital-owned or operated facilities. While in those instances a physician may not receive a direct profit (although he could if a "joint venture"), he receives an indirect profit by expanding the capacity of the hospital where he directs his patients. Further, hospital admitting privileges are granted only to very carefully selected physicians. Hospitals are now closing their staffs. Membership on a staff is a vigorously guarded and protected economic benefit. Whatever is applicable to a physician-owned facility also should be applicable to any facility owned directly or indirectly by a hospital at which the doctor holds staff privileges.

An additional complicating factor is that several hospitals in New Jersey, including the University of Medicine and Dentistry of New Jersey Hospital in Newark, have contracted with management corporations to manage their hospitals. Those corporations sell publicly issued stocks which many physicians own. The proposal of the Commissioner would prevent doctors from referring patients to the University of Medicine and Dentistry of New Jersey hospital. The same concepts also would prevent doctors from being shareholders in a proprietary hospital to which they admit patients.

2. The second question asks whether a licensee may bill for a service rendered by an employee for a

prescribed service in excess of actual cost to the employer. The answer is yes. This is not only currently accepted, it is a widespread practice. Whether the situation occurs in a professional practice or a commercial service corporation not related to health care, it is accepted that the employer will profit from the labor of an employee. The instance of physical therapy does not alter that premise. Physicians hire all categories of employees whose services may appear as separate charges on bills, and there is no reason why that should not continue to be legal. It is, of course, perfectly appropriate for physicians to hire other physicians and bill for those services at a rate higher than the actual cost to the employer. Assuming, however, that this practice is made improper, then it also should be improper for hospitals to bill for the services of employed licensees at a rate in excess of the cost to the hospital. The same would have to apply to HMOs. The real issue here, as with all the questions and situations, is whether the service was medically indicated and the charge reasonable. Anything else simply presents an unworkable situation.

3. This question asks whether commercial arrangements based on a percentage of gross income are acceptable. We assume that this question relates to situations where office space and/or equipment or services are rented or leased to a doctor by another, and the payments are predicated upon a percentage of the doctor's gross income. Such an arrangement gives a nonphysician an economic interest in a practice which is not advisable. We believe adequate terms can be arrived at and an amount certainly can and should be established.

In regard to physican ownership of a health-related stock, we believe if the stock is a public issue, i.e., sold through an exchange regulated by the Securities and Exchange Commission, there should be no requirement of disclosure nor any prohibition of ownership, referral, or use of the product. If the stock is a privately held issue, then the activity should be permitted but disclosure considered.

We believe the preceding discussion leads to the conclusion that the language offered by the Commissioner of Health is not acceptable or realistic, and is unworkable. It will deprive the public of service options, would reduce competition rather than encourage it, and also presents an incredible enforcement problem along with constitutional issues. As we have pointed out earlier, physicians benefit from hospital privileges. By referring patients to hospital-owned entities, the physician assures a more favorable review by the hospital appointing authority and a greater capacity to serve his practice. That clearly is an indirect and valuable benefit, and it would be precluded by the proposal. Also precluded would be joint ventures between doctors and hospitals.

We find that the present regulation of the Board, coupled with a "disclosure" requirement, and where appropriate, at the request of the patient, a prescription option, would be the most appropriate solution.

These comments are presented with the approval of the Board of Trustees on behalf of the 9,500 members of the Medical Society of New Jersey. We hope they are helpful to you.

REPORTING HAZARDOUS SUBSTANCES

The following is a letter received by Vincent A. Maressa, MSNJ Executive Director, from Robert Altman, M.D., Assistant Commissioner, Division of Epidemiology and Disease Control, New Jersey Department of Health:

I am writing in reply to your letter concerning problems that physicians are having with bills from the Department of Labor related to the Right to Know Law. I am sorry for the delay in replying to you but it took extended conversations with the Department of Labor to resolve the matter. We are very sorry for the confusion that this has caused physicians.

It was our original understanding with the Department of Labor that physicians who reported no hazardous substances on the Workplace Survey and wrote "no hazardous substances" on the assessment bill were exempt from paying the fee. This understanding was confirmed in a memo from Commissioner Goldstein to Commissioner Serraino of the Department of Labor. Prior to receiving your letter, we were not informed that the Department of Labor was unable to follow this procedure.

Because of some miscommunication, the Department of Health was not informed that the Finance and Controller's Office in the Department of Labor would only accept "no hazardous substances" on an assessment after the Department of Health had supplied the controller's office with a list of employers who had reported "no hazardous substances" on a Workplace Survey.

As a result, we continued to advise physicians according to our original understanding. We now know that the Department of Labor has not accepted the assessment bills from physicians that have the words "no hazardous substances" written on them. In fact, the Department of Labor has sent followup bills and delinquency notices to these physicians.

To correct this problem, the Department of Labor has agreed temporarily not to send any more bills or delinquency notices to employers in Standard Industrial Classification Code 80 (which includes physicians). In turn, the Department of Health will provide to the Department of Labor the names of physicians who have reported "no hazardous substances" on the Workplace Survey which they have completed and returned to the Department of Health. The employers on this list prepared by the Department of Health will be exempted from the fee or a refund will be made if the physician already has paid the assessment fee.

I hope that this arrangement is satisfactory. We would appreciate your conveying this information to the physicians who contact your office and through a notice in your newsletter.

Again, please accept our apologies for this misunderstanding and accept our appreciation for your assistance in correcting this problem. If there are further problems in this regard, please let me know right away.

PRO MONITORING PROJECT

The American Medical Association announces an innovative new program to evaluate physicians' and hospitals' experiences with the Peer Review Organiza-

tions (PROs) set up to monitor the health care delivered to Medicare beneficiaries. Under the PRO program, both utilization and quality issues will be looked at by state-level PROs under contract to the federal government. A percentage of all Medicare discharges will be reviewed with respect to a set of quality and utilization objectives contractually agreed to by each PRO with the Health Care Financing Administration (HCFA).

The AMA is interested in learning of individual physicians' and hospitals' experiences, both positive and negative, which they feel are attributable to the new peer review system. While the AMA is interested in all relevant experiences, areas of particular interest would include: changes in length of stay, admission and discharge policies, preadmission certification procedures, utilization and quality review results, administration relations between hospitals and physicians and the PROs, any demonstrable impact that PRO review may have on the cost or quality of care, and the results of any PRO efforts to review patients other than Medicare beneficiaries.

Physicians or hospital medical staffs who would like to share this information with the AMA are encouraged to describe their experience(s) in a brief letter and direct it to: AMA PRO Monitoring Project, Department of Health Care Financing & Organization, AMA Post Office Box 10947, Chicago, Il 60610.

All sources of information provided will be kept confidential. The data will be carefully analyzed and the results used by the AMA as the Association pursues further involvement with PROs and as it develops new ways to assist physicians and medical staffs in dealing with this program.

GOOD SAMARITAN

The following is a letter sent from Martin E. Johnson, Director of Public Affairs and Medical Education, MSNJ, to Annemarie Cooke, staff writer from the *New Brunswick Home News:*

Your picture-story of the serious automobile accident that occurred Thursday evening, April 11, 1985, appeared in the Friday, April 12, 1985, issue of the *Home News.*

I have since learned that Charles Akselrad, M.D., of Princeton, was the physician that came upon the scene and gave emergency medical treatment to the victims. His intervention and skill contributed to the survival of the accident victims.

Many of the outstanding professional accomplishments of physicians go unnoticed. Doctor Akselrad left the scene of the accident after the emergency squads were able to transport the victims to the hospital.

True professional that he is, he did not identify himself, but took consummate pleasure in knowing that he contributed to saving the young victims' lives.

It's nice to be part of a story with a happy ending for a change.

FINI

"Whatever knowledge you put in your head can never be stolen by anyone—learn every day."

LEGISLATIVE UPDATE

Status of Legislation on Which MSNJ Has Taken an Active Position

Bill	Subject	MSNJ Position	Committee	Present Status
S-70 Codey	To change requirements for eligibility to be Commissioner of Health	Active Opposition	Senate: IHW	In committee
S-111 Bubba	To require a physician to present surgical consent forms at the time surgery is agreed upon	Active Opposition	Senate: LIP	In committee
S-243 Hagedorn	To provide procedures for involuntary civil commitment of the mentally ill	Active Opposition	Senate: IHW	In committee
S-424 Dorsey	To provide for the abolishment of certain state agencies for specific periods of time and to create a Joint Legislative Committee on Regulatory Agencies	Active Support	Senate: SGF&IR&VA	In committee
S-607 Bassano	To require the padding of all metal bars in school buses with energy-absorbing materials to be included in the State Board of Education's rules and regulations	Active Support	Senate: LPS&D	In committee
S-723 Brown	To require the State Department of Health to prepare a booklet on breast cancer and require physicians to give a copy of the booklet to breast cancer patients	Active Opposition	Senate: IHW	In committee
S-752 Hirkala	To provide that certain information of hospitals and long-term health care facility review committees be considered confidential	Active Support	Senate: IHW	In committee
S-754 Hirkala	To provide immunity from civil liability to members of hospital governing bodies in connection with certain review actions	Active Support	Senate: J	In committee
S-1067 Feldman	To establish and license two categories of social workers	Active Opposition	Senate: IHW	In committee
S-1079 Dumont	Provides for a 3-year statute of limitations, except for fraud, intentional concealment, or nontherapeutic or diagnostic purpose. Minors have until age 11 or any injury prior to age 8	Active Support	Senate: J	In committee
S-1112 Hurley	To establish a cap on the amount of damages which may be awarded for pain and suffering in certain civil actions	Active Support	Senate: J	In committee
S-1135 Dalton	To eliminate certain sources of windfall benefits in personal injury and wrongful death actions	Active Support	Senate: J	In committee

LEGISLATIVE UPDATE

Status of Legislation on Which MSNJ Has Taken an Active Position

Bill	Subject	MSNJ Position	Committee	Present Status
S-1140 Feldman	To impose certain requirements on the plaintiff in a medical malpractice proceeding	Active Support	Senate: J	In committee
S-1182 Saxton	To establish the Automobile Insurance Medical Fee Schedule Board	Active Opposition	Senate: LIP	In committee
S-1190 Feldman	To authorize a court to award reasonable attorney's fees to a party who prevails against a frivolous claim for relief in a civil action	Active Support	Senate: J	In committee
S-1775 Orechio	Allows chiropractors who are licensed to practice by written examination in any state and who have completed 4,300 classroom hours in a chiropractic school to become licensed to practice by virtue of a clinical examination	Active Opposition	Senate: LIP	Out of Assembly; 2nd reading
S-1839 Dalton	Amends existing law to allow a psychologist to supply evidence of a need for guardianship of a minor who is in the custody of the NJ Division of Mental Retardation	Active Opposition	Senate: IHW	Out of committee; 2nd reading; amended
S-1840 Cardinale	Exempts the private practice of medicine from the certificate of need law	Active Support	Senate: IHW	In committee
S-1846 Garibaldi	Provides that cancers caused by exposure to heat, cold, radiation, or a known carcinogen which manifest themselves in active police or firemen are assumed to be accidental and work-related disabilities	Active Opposition	Senate: SGF&IR&VA	In committee
S-2019 Lynch	Creates the profession of contact lens dispensing and fitting for nonphysicians and nonoptometrists. Licensure and regulation would be through the Board of Examiners of Ophthalmic Dispensers and Ophthalmic Technicians. A prescription by a licensed optometrist or physician would be required	Active Opposition	Senate: LIP	In committee
S-2159 Hagedorn	Substantially alters the involuntary commitment law. Significantly, certification may be effected by psychologists, nurses, or social workers who have conducted examination within the three days prior to certification	Active Opposition	Senate: J	In committee

LEGISLATIVE UPDATE

Status of Legislation on Which MSNJ Has Taken an Active Position

Bill	Subject	MSNJ Position	Committee	Present Status
S-2379 Costa	Provides that consulting physicians are not to be reimbursed unless patient has agreed, in writing, prior to consultation. Substantial incapacity of patient and mandatory consultation as a result of law, hospital rule, or insurance contract are excepted	Active Opposition	Senate: IHW	In committee
S-2544 Bubba	Requires express written consent to surgery except in cases of physical or mental incapacity or emergencies. The State Board, after consultation with the Health Dept., MSNJ, and NJHS, shall prescribe the consent forms which shall be used by physicians	Active Support	Senate: LIP	In committee
S-2869 Codey	Amends certificate of need to include physicians whenever a health service has been regionalized by regulation of the Dept. of Health. Regulation would terminate within three years, at which time, the Commissioner could readopt the regulation	Active Opposition	Senate	In committee
	Senate Committee Key ED: Education IHW: Institutions, Health and Welfare J: Judiciary LIP: Labor, Industry and Professions LPS&D: Law, Public Safety and Defense SGF&IR&VA: State Government, Federal & Interstate Relations & Veterans Affairs			
A-115 Otlowski	To authorize optometrists to prescribe a limited number of eye medications	Active Opposition	Assembly: HERP	In committee
A-708 Hardwick	To create a temporary committee to study Diagnosis Related Group System used for setting hospital rates and appropriate $45,000	Active Support	Assembly: CHHS	In committee
A-926 Weidel	To create an Automobile Insurance Fee Schedule Board in the New Jersey Department of Insurance to adopt a reasonable fee schedule for medical services arising from passenger automobile accidents	Active Opposition	Assembly: BI	In committee
A-960 Miller	To permit individual patients or insurers to appeal hospital bills in cases of assignments under the Diagnosis Related Groups	Active Support	Assembly: CHHS	In committee

LEGISLATIVE UPDATE

Status of Legislation on Which MSNJ Has Taken an Active Position

Bill	Subject	MSNJ Position	Committee	Present Status
A-963 Miller	To eliminate the Diagnosis Related Groups methodology and replace it with one to be devised by the NJ Dept. of Health in one year	Active Support	Assembly: CHHS	In committee
A-1056 Muziani	To require attending physicians and certified nurse midwives to inform pregnant women of any drugs expected to be used during pregnancy and the possible effects thereof	Active Opposition	Assembly: CHHS	Passed in Assembly; received in Senate committee
A-1116 Patero	To permit licensed psychologists to certify disability under Temporary Disability Benefits Law	Active Opposition	Assembly: L	Out of committee; 2nd reading; amended
A-1159 Herman	To require licensed physicians or chiropractors to notify the State Board of Medical Examiners if they accept Medicare assignments	Active Opposition	Assembly: HERP	Out of committee; 2nd reading; amended
A-1471 Garvin	To require a physician to obtain, in advance, the patient's authorization to perform a biopsy or mastectomy	Active Opposition	Senate: IHW	Signed into law as c. 185 P.L. 1984
A-1541 Karcher	To provide for the licensing of persons who practice hypnosis and limit the practice, teaching, or preparation of hypnosis tapes to licensed practitioners	Active Opposition	Assembly: HERP	Out of committee; 2nd reading; amended
A-1559 Garvin	Requires Dept. of Health and the State Board of Medical Examiners to prepare a booklet on all aspects of the treatment of breast cancer. Physicians are required to distribute the book to appropriate patients and to discuss it with them	Active Opposition	Assembly: CHHS	In committee
A-1682 Muhler	Creates a seven-person Board within the Department of Human Services vested with the authority to release or continue the commitment of persons who were found incapable of standing trial or not guilty by reasons of insanity. A Superior Court judge currently makes these decisions	Active Opposition	Assembly: CHHS	In committee
A-1870 Garvin	Amends existing statutes to require either seat belts or restraint systems for all children under ten in a motor vehicle. Current law applies to children under age five	Active Support	Assembly: CI	In committee

LEGISLATIVE UPDATE

Status of Legislation on Which MSNJ Has Taken an Active Position

Bill	Subject	MSNJ Position	Committee	Present Status
A-1921 Miller	Establishes a 3-year statute of limitations in tort actions against health care providers. Children would have until age 11 to bring action for injuries prior to age 8. After age 8, they come under the 3-year standard. Fraud, concealment, and unintentional foreign bodies "toll" the statute	Active Support	Assembly: JUD	In committee
A-1922 Miller	Provides that within 60 days of filing a medical malpractice complaint, the plaintiff must supply an affidavit, by a qualified expert, that reasonable cause exists to believe malpractice occurred	Active Support	Assembly: JUD	In committee
A-2115 Otlowski	Permits optometrists to use topical drugs for treatment and diagnostic purposes	Active Opposition	Assembly: CHHS	Returned to Committee
AR-31 Herman	Requests the Commissioner of Health to educate the public, particularly young people, about the dangers of cigarette smoking	Active Support	Assembly: CHHS	In committee
A-1918 Miller	Provides that collateral sources of payment shall be used to offset damages. Further provides structured payments may be used at the request of either party if the future damages exceed $100,000	Active Support	Assembly: JUD	In committee
A-1919 Miller	Provides a $100,000 cap on damages for pain and suffering to personal injury actions	Active Support	Assembly: JUD	In committee
A-2106 Paterniti	Requires nursing homes with 100 beds or more to dedicate 10 percent of bed capacity to indigent, 10 percent to complex care, and 10 percent for medical day care services	Active Opposition	Assembly: CHHS	In committee
A-2122 Cooper	Establishes seating restraint and emergency exit requirements for school buses	Active Support	Assembly: ED	In committee
A-2293 Kalik	Appropriates $9.45 million for the UMDNJ Osteopathic School in Stratford	Active Opposition	Assembly: RFA	Signed into law as c. 4 P.L. 1985
A-2304	To require that the driver and passengers in the front seat of an operating passenger automobile wear the safety seat belt provided	Active Support	Assembly: LPSD	Signed into law as c. 179 P.L. 1984

LEGISLATIVE UPDATE

Status of Legislation on Which MSNJ Has Taken an Active Position

Bill	Subject	MSNJ Position	Committee	Present Status
A-2140 Rooney	Provides that a judge may order a juvenile offender to be examined by a physician, optometrist, or audiologist	Active Opposition	Assembly: JUD	Passed in Assembly; in Senate committee
A-2757 Kern	Empowers the SBME to license and regulate nurse-midwives. Creates five-member Nurse-Midwives Examining Committee which would have the power to license and regulate nurse-midwives. Committee would have stipulated, delegated powers from Board and would function independent of Board	Active Opposition	Assembly: HERP	In committee
A-2889 Herman	Provides for separate licensing board to register physician assistants who would function under the supervision of a licensed physician at the 2:1 ratio	Active Opposition	Assembly: CHHS	In committee
A-3110 Hardwick	Provides for structured payments in cases exceeding $100,000 liability in future damages. Prohibits punitive damages in medical malpractice cases	Active Support	Assembly: JUD	In committee
A-3111 Hardwick	Requires the Court to award attorneys fees to the prevailing party if the other side has been guilty of frivolous actions	Active Support	Assembly: JUD	In committee

Assembly Committee Key

BI:	Banking and Insurance
CHHS:	Corrections, Health and Human Services
CI:	Commerce and Industry
ED:	Education
HERP:	Higher Education and Regulated Professions
JUD:	Judicial
L:	Labor
LPSD:	Law, Public Safety and Defense
RFA:	Revenue, Finance and Appropriations

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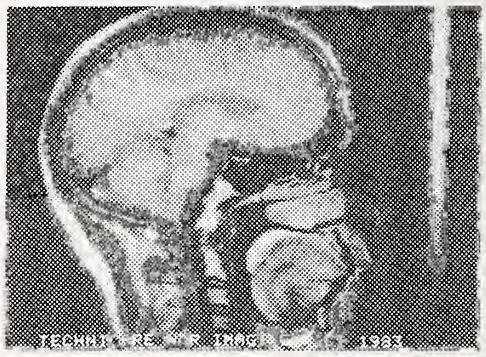
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PROFESSIONAL LIABILITY COMMENTARY*

Consents and Claims

Breast Tumor Surgery Consent; Videotaping of Childbirth; GP Office Claims; Attorney Fees; Car Crash Award

Governor Kean signed into law a measure adopted by the legislature which spells out a specific procedure to be followed in obtaining a patient's consent to surgery for a breast tumor. Assembly Bill 1471 states that before a physician operates on a patient for a tumor of the breast, he must obtain the patient's written consent to: a biopsy only; a mastectomy only; or both a biopsy and, if necessary, mastectomy or other operation. Furthermore, the act states that the form shall be constructed so as to indicate this choice. The bill is effective immediately. Failure to comply with this act makes the physician liable to action by the Board of Medical Examiners.

The Risk Prevention Department of the Medical Inter-Insurance Exchange of New Jersey would recommend that the surgical staff consult with the hospital and medical staff attorneys where they practice and produce a form which complies with the requirements of this law.

In an effort to assist in developing this form, MIIENJ has constructed the example as shown in the Figure. This is only an example and should not be considered as legal advice. We would stress again that the surgical staff should consult the hospital's attorneys in preparing the final format of the form. Also, it should be noted that other items such as the permission for anesthesia, permission to dispose of tissue removed, etc., normally included in all consents, have not been included here for the sake of brevity.

I, _____, understand that I am to undergo surgery for a lump in my breast by _____, and his assistants and surgical staff. I hereby consent to this treatment, as indicated below:

BIOPSY ONLY

I hereby consent to have a biopsy of a lump in my breast performed. However, I do **NOT** consent to have any other surgical procedure performed in conjunction with the biopsy. I understand that, if the biopsy reveals the tumor to be malignant, further surgery may be indicated. I also understand that this would require my undergoing administration of anesthesia for a second time, with the risks attendant thereto.

_____
Signature

REMOVAL OF BREAST, OR OTHER OPERATION

I hereby give consent to an operation to remove my breast. I also understand that, at the time of my surgery, it may be discovered that some other operation is necessary to properly treat my breast abnormality, and I hereby give consent to such treatment and operations as deemed necessary by the surgeon.

_____
Signature

BIOPSY, REMOVAL OF BREAST, AND OTHER NECESSARY OPERATIONS

I hereby give consent to a biopsy to determine the nature of my breast abnormality. Should it be determined that I have a malignancy or other abnormality which requires additional surgery, I give further consent to have such operations, including but not limited to removal of my breast, during the same procedure. I recognize that the decision to perform such further operations shall be at the discretion of my surgeon and other physicians he/she shall deem it appropriate to consult, and that I shall **NOT** be awakened from anesthesia to participate in those decisions.

_____
Signature

Figure—Sample form.

VIDEOTAPING OF CHILDBIRTH

The making of home videotape movies to record significant events in our lives is commonplace. Many people derive great emotional pleasure and satisfaction from videotaping weddings, bar mitzvahs, and even testamentary dispositions (wills). Given the penchant to videotape significant familial events, it is no wonder that obstetricians/gynecologists are being asked with increasing frequency to permit the videotaping of the births of their patients' babies.

What are the legal risks of permitting childbirth to be videotaped? Assuming that the birth of the child is otherwise uneventful and results in a healthy child, there is little legal risk. However, if an untoward event occurs and a less-than-perfect baby is born, the ob-

*This item from the Department of Professional Liability Control, MSNJ, was prepared by James E. George, M.D., J.D., and A. Ronald Rouse, who are, respectively, Director of the Department and Director of Special Projects.

stetrician can expect that the videotape will be used as an evidentiary weapon against him. Copies of the videotape can be viewed by the expert witness for the plaintiff to form a basis for the expert's opinion as to any breach of the accepted standard of care. The tape also can be introduced into evidence at trial for viewing by the jury.

In addition, the videotape may be used to support the parents' claim to a right to recover damages for their emotional distress. Since 1980, the Supreme Court of New Jersey has recognized the right to recovery for negligent infliction of emotional distress.

In the case of *Portee v Jaffee*, 84 N.J. 88, the plaintiff mother of a young boy witnessed the suffering and resulting death of her son as he lay trapped between the floor of an elevator and the elevator shaft. The court, in that case, held that the mother could recover monetary damages for her own emotional distress in witnessing the events, provided four elements were proved: 1) the death or serious physical injury of another caused by defendant's negligence; 2) a material or intimate familial relationship between plaintiff and the injured person; 3) observation of the death or injury at the scene of the accident; and 4) resulting severe emotional distress.

If the plaintiff prevails regarding negligence and also proves that he has suffered severe emotional distress as a result, a videotape of the events most likely would deprive the physician of a viable defense on the issue of observation of the death or injury at the scene.

On the whole, the legal risks to the physician for permitting parents to videotape the birth of their child clearly outweigh any potential benefits to the parents. Physicians are advised to politely reject any patient requests to videotape childbirth or any other surgical procedure.

CLAIM INCIDENTS FOR GPS OFTEN ARISE IN OFFICE SETTING

The belief is held widely that most incidents leading to malpractice claims occur in hospitals. A recent analysis of claims filed against physicians insured by the Pennsylvania Medical Society Liability Insurance Company revealed that allegations of negligence on the part of general practitioners arose out of care provided in the physician's office in half of the instances.

"This is at variance with the incident location breakdown for all claims and suits against PMSLIC-insureds which demonstrates only 18 percent of the total claims and suits occurring in the office setting. Therefore, even though a very small percentage of the general practitioner's practice is inhospital, patients still will sue general practitioners based on allegedly negligent care rendered in the office setting," said PMSLIC's *Patient Rx Newsletter* for January 1985.

PMSLIC listed the allegations of negligence against general practitioners. The list included negligent drug therapy, negligent trauma management, patient injury during or as a result of treatment, failure to diagnose carcinoma, and negligent obstetrical care. PMSLIC said the cases stemming from prenatal, perinatal, and postnatal care were among the most expensive types of cases and made two recommendations to reduce numbers of such suits: GPs must keep up-to-date on technology and methodology of the obstetrical specialty and be able to identify a high-risk pregnancy and when and if consultation or referral is needed. (*Medical Liability Monitor*, Vol. 10, No. 1, January 29, 1985)

ATTORNEY'S FEES INCREASED IN MALPRACTICE SUIT

In view of excellent results and a patient's satisfaction in a malpractice action, a New Jersey trial court granted an increase in attorney's fees. The patient sued a hospital and others because of a breast biopsy that was misdiagnosed as benign. As a result, a tumor was removed and another developed. She underwent a radical mastectomy for the stage III metastatic cancer. A physician admitted the error, and the patient was awarded a gross sum of $275,000. The patient supported the request of an attorney's fee increase because she recovered more than expected. The court increased the fee from 10 to 20 percent—*Burt v Hackensack Hospital Association*, 477 A.2d 843 (N.J. Super. Ct., Feb. 26, 1984) (*The Citation*, Vol. 50, No. 9, February 15, 1985)

MALPRACTICE AWARD UPHELD IN DEATH OF CAR CRASH VICTIM

A $1.3 million malpractice award granted to a Lakewood housewife and her three young children for the wrongful death of her 36-year-old husband was upheld by a state appeals court. The plaintiff filed a lawsuit against two physicians following an automobile accident.

The plaintiff charged that the doctors deviated from normal practice when they failed to do exploratory surgery, which would have confirmed their suspicion that her husband was suffering from intra-abdominal hemorrhaging, according to court records. Although the plaintiff's husband consented to the surgery on September 27, 1979, it had not been done on October 1, 1979, when her husband died.

According to the court decision, the plaintiff's husband was severely injured as a passenger in the accident. When he was admitted to the hospital, he had a fractured pelvis, two fractured ankles, and a cerebral concussion. Although he was stabilized after he was admitted to the hospital, his condition later deteriorated and he died, according to papers filed with the court.

A jury awarded the plaintiff and her children, who are ages 12, 11, and 6, a judgment of $1,146,132. She was required to subtract from that award $115,000 she had received in a successful lawsuit against the driver of the car. When the interest was computed, she was granted a total of $1,321,793, the court decision said.

The doctors appealed the verdict. They contended that the award was excessive and that the driver of the car should not have been excluded from liability in this case. But Judges James Coleman and Arthur Simpson of the Appelate Division of Superior Court rejected those contentions and affirmed the verdict and the monetary award. "The scope of our review is limited, and the trial court's denial of a new trial as to damages must be sustained unless it clearly appears that there was a miscarriage of justice," Simpson said, speaking for the two-judge panel. (*Star Ledger*, March 1, 1985)

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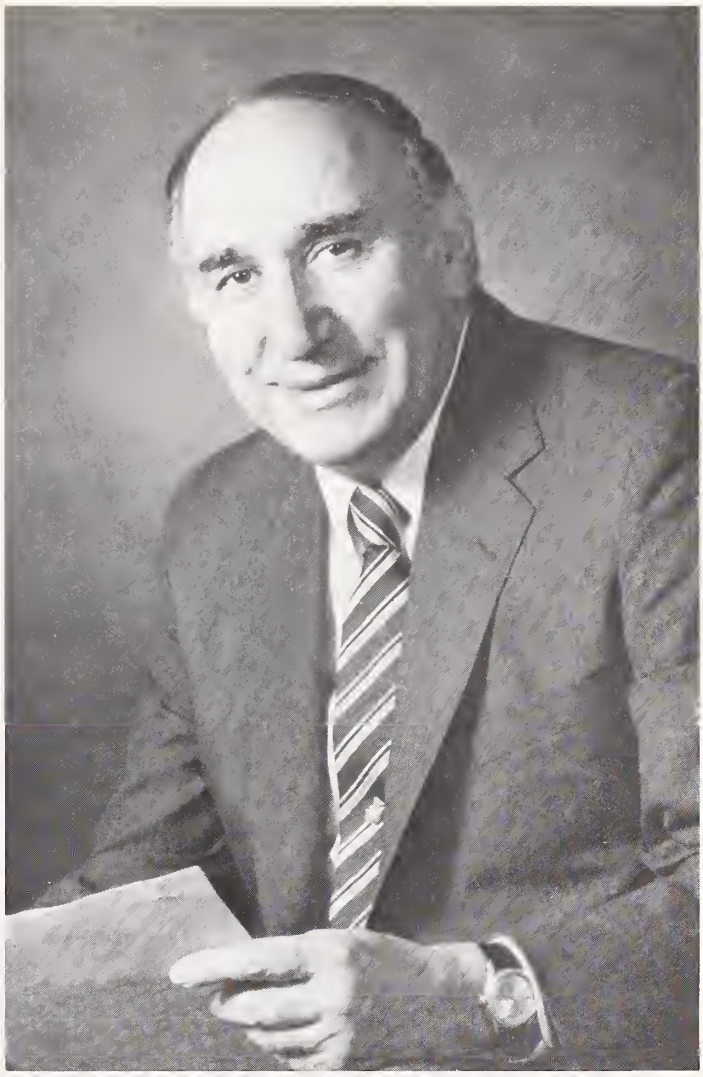
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MSNJ President: Ralph J. Fioretti, M.D.

The 193rd President of MSNJ is Ralph J. Fioretti, M.D., a family physician from Paramus.



Ralph J. Fioretti, M.D.

The Medical Society of New Jersey installed its 193rd President, Ralph J. Fioretti, M.D., of Paramus on May 3, 1985. Dr. Fioretti is a board certified family physician; his patients, hospital, and community have been the "other family" for almost 40 years.

Among the honors Dr. Fioretti recently has received is a Resolution of Commendation for his long and distinguished years of service, leadership, and commitment to the community, presented by the General Assembly of the state of New Jersey. Additionally, he is a recipient of a Certificate of Commendation from the Bergen County Board of Chosen Freeholders for distinguished service to the people of Bergen County.

Dr. Fioretti attended elementary and secondary schools in Tuxedo, New York. He graduated from Villanova University with a bachelor of science degree and received his medical degree from St. Louis University. After his residency in Hackensack, he served as medical officer in the United States Navy, on active duty aboard a destroyer in both the Atlantic and Pacific theatres during World War II.

Dr. Fioretti has held many offices: He has been President of the Bergen County Medical Society, the first President of the Bergen County Professional Standards Review Organization, a member of the Bergen Pines County Hospital Board of Managers, a Trustee of the Bergen Community Blood Center, a member of the Medical Advisory Board of the Bergen County Health Department, and a member of the Governor's Committees for both Conservation of Vision and Mental Health.

At the Hackensack Medical Center where he completed a residency program. Dr. Fioretti has served as president of the general staff and for two terms as chairman of the medical board.

He is a member of JEMPAC, the American Academy of Family Physicians, the American Medical Association, The Academy of Medicine of New Jersey, and the Bergen County Medical Society; Dr. Fioretti has been recertified as a Diplomate by the American Board of Family Practice.

Dr. Fioretti has found time to be physician to the Police Department of Rochelle Park for over 30 years and has been a long-time sponsor of the Little League and soccer teams. He has been an elementary and high school physician for many years, and was instrumental in obtaining the first polio vaccine in the state for the "polio pioneer" school children. He helped start the Community Blood Bank, served on the Board of Trustees of the Paramus Boys Club, and works on special committees as a volunteer for the American Cancer Society.


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Contraindications: Severe left ventricular dysfunction (see *Warnings*), hypotension (systolic pressure <90 mm Hg) or cardiogenic shock, sick sinus syndrome (if no pacemaker is present), 2nd- or 3rd-degree AV block. **Warnings:** ISOPTIN should be avoided in patients with severe left ventricular dysfunction (e.g., ejection fraction <30%) or moderate to severe symptoms of cardiac failure. Control milder heart failure with optimum digitalization and/or diuretics before ISOPTIN is used. ISOPTIN may occasionally produce hypotension (usually asymptomatic, orthostatic, mild, and controlled by decrease in ISOPTIN dose). Occasional elevations of liver enzymes have been reported; patients receiving ISOPTIN should have liver enzymes monitored periodically. Patients with atrial flutter/fibrillation and an accessory AV pathway (e.g., W-P-W or L-G-L syndromes) may develop a very rapid ventricular response after receiving ISOPTIN (or digitalis). Treatment is usually D.C.-cardioversion. AV block may occur (3rd degree, 0.8%). Development of marked 1st-degree block or progression to 2nd- or 3rd-degree block requires reduction in dosage or, rarely, discontinuation and institution of appropriate therapy. Sinus bradycardia, 2nd-degree AV block, sinus arrest, pulmonary edema, and/or severe hypotension were seen in some critically ill patients with hypertrophic cardiomyopathy who were treated with ISOPTIN. **Precautions:** ISOPTIN should be given cautiously to patients with impaired hepatic function (in severe dysfunction use about 30% of the normal dose) or impaired renal function, and patients should be monitored for abnormal prolongation of the PR interval or other signs of overdosage. Studies in a small number of patients suggest that concomitant use of ISOPTIN and beta blockers may be beneficial in patients with chronic stable angina. Combined therapy can also have adverse effects on cardiac function. Therefore, until further studies are completed, ISOPTIN should be used alone, if possible. If combined therapy is used, patients should be monitored closely. Combined therapy with ISOPTIN and propranolol should usually be avoided in patients with AV conduction abnormalities and/or depressed left ventricular function or in patients who have also recently received methyldopa. Chronic ISOPTIN treatment increases serum digoxin levels by 50% to 70% during the first week of therapy, which can result in digitalis toxicity. The digoxin dose should be reduced when ISOPTIN is given, and the patient carefully monitored. ISOPTIN may have an additive hypotensive effect in patients receiving blood-pressure-lowering agents. Disopyramide should not be given within 48 hours before or 24 hours after ISOPTIN administration. Until further data are obtained, combined ISOPTIN and quinidine therapy in patients with hypertrophic cardiomyopathy should probably be avoided, since significant hypotension may result. Adequate animal carcinogenicity studies have not been performed. One study in rats did not suggest a tumorigenic potential, and verapamil was not mutagenic in the Ames test. *Pregnancy Category C:* There are no adequate and well-controlled studies in pregnant women. This drug should be used during pregnancy, labor, and delivery only if clearly needed. It is not known whether verapamil is excreted in breast milk; therefore, nursing should be discontinued during ISOPTIN use. **Adverse Reactions:** Hypotension (2.9%), peripheral edema (1.7%), AV block: 3rd degree (0.8%), bradycardia: HR<50/min (1.1%), CHF or pulmonary edema (0.9%), dizziness (3.6%), headache (1.8%), fatigue (1.1%), constipation (6.3%), nausea (1.6%). The following reactions, reported in less than 0.5%, occurred under circumstances where a causal relationship is not certain: confusion, paresthesia, insomnia, somnolence, equilibrium disorders, blurred vision, syncope, muscle cramps, shakiness, claudication, hair loss, maculae, and spotty menstruation. Overall continuation rate of 94.5% in 1,166 patients. **How Supplied:** ISOPTIN (verapamil HCl) is supplied in 80 mg and 120 mg sugar-coated tablets. July 1982 2068

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Inaugural Address: Hippocrates or David Stockman? The Days of Complacency Are Over*

Ralph J. Fioretti, M.D., Rochelle Park

Ralph J. Fioretti, M.D., the 193rd President of the Medical Society of New Jersey presented this inaugural speech at the Annual Meeting in May.

For over two thousand years, since the time of Hammurabi, doctors of medicine have dedicated themselves to a code of ethics, and although changing times and mores have produced a different set of words and phrases, the underlying bent of our commitment has been to help the sick, to do no harm, to educate the novice, and to share medical knowledge with fellow physicians.

Contrast these ethics with the advice that we now receive from marketing experts, entrepreneurs seeking membership in PPOs, economists, and unfortunately, an increasing number of doctors of medicine. Their advice says that in today's world, the oath of Hippocrates, wherein it states that the physicians have a primary responsibility to the individual patient, is irrelevant. These counselors would have us believe that, instead, we should adopt a business ethic. Economics Professor Uwe Reinhardt at Princeton University describes a business ethic as that which maximizes the return on investment to your shareholders without breaking the law.

These thoughts were expressed in Chicago at the inaugural of Joseph F. Boyle, M.D., the 139th president of the American Medical Association. They serve to remind us that professional ethics require that the "health and welfare of patients shall be the first consideration, not allowing economics, politics, race, or religion, or any other circumstance to take preference."

HEALTH CARE FOR SENIOR CITIZENS

Now, in the 20th century PRO legislation has arrived. The enactment of this law, in its haste for cost containment, eventually will cross over and have a serious impact on the quality of care to our senior citizens. As taxpayers, we applaud the efforts to cut out waste. As physicians, we will do whatever is necessary to comply with the law ... providing it does not harm our patients.

We must show senior citizens that they will be the victims of this cost containment, and that we, their doctors, whom they hold in high esteem, stand ready and willing to fight for their rights. We must show them that we care and we will not let them down. We must be guided by conscience to do what is right.

To accomplish this end, I am announcing, therefore, that my first action as President will be to appoint a task force of physicians. I will charge it with the responsibility of meeting with senior citizens around the state, to explain what is happening to them through government action and to discuss the pitfalls raised by Medicare cutback and underutilization. Senior citizens must realize that their physicians are being coerced and pressured to ration their care. We must keep an open dialogue with them and continue to be

*Presented at the Medical Society of New Jersey Annual Meeting, Lancaster, Pennsylvania, on May 3, 1985.

their advocate in the complicated health care delivery system of today.

We must remind our legislators and insurance executives that, in whatever setting care is provided, the books should not be balanced on the backs of our patients. Our first obligation must be to seniors, and we must not, we can not, and we will not, permit that obligation to be compromised. A far greater evil than overutilization is underutilization, or the rationing of care.

By making this my first order of business, I hope it will emphasize the importance which I give to this issue.

LIFE EXPECTANCY AND HEALTH CARE

From 1970 to 1983, life expectancy increased by four years—more than any increase in the preceding two decades. Most of this gain came among middle aged and elderly persons. Americans who now reach the age of 65 can expect to live until age 82.

"Our nation's health grades are very good, indeed" said Health and Human Services Secretary Margaret Heckler. Yet, today we are witnessing the dismantling of the greatest health care delivery system the world has ever known. Will life expectancy continue to increase as we more and more ration health care?

THE COST OF CARE

The technological advances of the past few decades have been staggering: the CT scanner, the NMR, and dozens of new surgical techniques. We are keeping people alive longer and giving them a better quality of life. This costs money. I have not heard the public complain about this. I have not heard an outcry that the public, our patients, will trade quality health care to save money. Yet, the bureaucracy is doing just that.

When the DRG system came to New Jersey five years ago, it began to force hospitals to look for other ways to earn money. Think about that! Our hospitals, where we entrust the care of our patients, are busy concentrating on corporate reorganizations and developing for-profit subsidiaries instead of spending all of their energies on improving patient care.

In a *Newsweek* article, Dr. Joel Posner, a pulmonary specialist from Philadelphia, wrote that, when President Kennedy's two-day-old infant son died, the bill was less than $500 in 1963. But if Patrick were born today, special equipment, new techniques, and a team of specialists probably would keep him alive and send him home—at a cost of many thousands of dollars. Dr. Posner noted that a friend, a cardiologist at New York Hospital, suffered crushing chest pains while making rounds in 1967, and died in 48 hours. His bill was $350. His brother, a neurosurgeon, also experienced chest pains at work, but now it was 1979. Through catheterization and bypass surgery, his friend survived. But the cost this time was $13,000.

LEGISLATION AND HEALTH CARE

What is happening today is that government officials are destroying the system of quality care by reducing costs. The public is unaware of this. The public is being led to believe that the system is wasteful and the government is merely cutting out the fat. The public does not know the other side of the story, because we have not done enough to tell them. The public has not been confronted with the choice of quality versus cost because we have not forced the confrontation.

I know from personal experience that doing battle with the bureaucracy can be a frustrating experience. I know from speaking to hundreds of doctors in New Jersey how disillusioned many of you are. I hear talk about early retirement because doctors just do not want to put up with all of the interference. Medicine is on the verge of losing many good doctors in New Jersey, and that is a shame.

Many doctors have been very active in the public arena, fighting to preserve the quality of care, but the time has come when all of us need to get involved. We are a sleeping giant. We are a group of almost 10,000 strong, of enormous political power. We have a responsibility to our patients and to our hospitals, to keep the lines of quality and cost from crossing, and all of us must face up to our responsibility.

Every doctor in this room has worked very hard to get here. Some more than others. We all dreamed of the day when, because of our knowledge and years of clinical training, we could save a life and ease someone's pain. There is no greater satisfaction. No amount of money can replace this. Yet, we sit idly by while nonprofessionals are obtaining by legislation what we have earned by education.

Because the public has held us in such high esteem, and because we felt the political process was beneath us, we have allowed legislation, rules, and regulations to be passed while we stayed untouched in our ivory towers.

If we are to survive, physicians must be involved with the political process.

If we are to survive, we must be involved in the political process. Those who fail to perceive the essentials of involvement in political action shortly will become its victims.

There are thousands of federal bills and hundreds of state bills introduced in each session designed to affect the practice of our profession. The Medical Society of New Jersey and the AMA are doing their best within the environment that exists and within the resources at their command. Physicians constantly bemoan "organized medicine's ineffective lobby." Probably every member of this House has talked to an officer of this Society about political action and legislative infringement. But the real issue is not that we talk to each other, but to the state legislators. There are 120 of them. There are 10,000 of us. The numbers speak for themselves!

In the state legislature, there are bills pending that will both assist and injure us. Among these are: professional liability reform; to require written consent for consultation; to license hypnotists to treat injury and illness; to allow optometrists to use therapeutic drops; and to require physicians to obtain a certificate of need. On the federal level, there is talk of DRG appli-

cation to physician reimbursement, further fee freezes, national licensing, and mandatory assignment under Medicare. I am not overstating the dangers to us. Nor do I think I am overestimating our ability to shape events if you care to participate. I urge you once again to help us convince your county society members and your hospital colleagues of our common mission. If we cannot convince each other, how in the world can we convince the public!

BEING INFORMED

In the matter of such subjects as euthanasia, abortion, medical fee freeze, and PRO regulations, some newspapers and magazines fail to meet minimal standards of objectivity. The public often is bombarded with heavy-handed editorializing. We now must undertake, in every way possible, the task of informing our patients and the general public of all the manifestations of these problems. We cannot hide behind anonymous attributions. Let us state our case as we see it and be proud of our stand.

The world is full of great opportunities disguised as insoluble problems. Let us rededicate ourselves to action. Let us pledge to present a united front. Let us leave here angry at how we are being abused. Let us commit ourselves to working with each other and our hospitals to change things. Let us decide that we will put in the time and financial resources to win. The days of complacency are over!

Every effort will be made to keep you informed. I urge you to continue reading *The Journal* of the Medical Society of New Jersey. You will be proud to know that it has just been awarded first prize in the National Medical Journalism Competition.

I wish to thank sincerely the Auxiliary for all they do for us. They represent a wide diversity of talents and work very hard, with no thought of recognition or compensation. Much of the good will for medicine that remains in the public eye is due to their accomplishments on our behalf.

CONCLUSION

We must remind ourselves that we cannot turn back the clock. We must restructure our way of life as it relates to the delivery of health care and make major adjustments. But we must let the politicians know that, whenever they introduce a bill or propose a regulation that will jeopardize the quality of patient care, they will be confronted by the angry resistance of organized medicine. I am counting on you to stand at my side as we do battle.

In critical times such as these, when feelings and emotions run high, we must not succumb to the criticisms unjustly heaped on our profession. There should be no retreat.

I promise I will do my best for you. Thank you for the privilege of serving as your President. I have good people to work with, and look forward to a rewarding year.

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J-4044 January 19

FAREWELL ADDRESS: A YEAR IN REVIEW*

FRANK Y. WATSON, M.D., GLEN RIDGE

Dr. Watson presents an accounting of his activities as the 192nd President of the Medical Society of New Jersey.

I shall give you an accounting of my activities as your President during the past year; I shall identify what I consider to be the major challenges facing the medical profession; and I will comment briefly as to what I think we must do to deal with these challenges.

I attended meetings of ten of our county medical societies, five neighboring state medical societies, two meetings of the House of Delegates of the AMA, the AMA Leadership Conference, a meeting of the Council on Legislation of the AMA, and numerous meetings with allied health organizations, groups, and individuals including the Board of Trustees of the New Jersey Hospital Association, the New Jersey Society of Medical Assistants, the New Jersey Academy of Family Practice, The Academy of Medicine of New Jersey, the New Jersey Association of Medical Specialties, health insurance companies, the Commissioner of Health and his special committee on Health, the Commissioner of Insurance, federal consultants for DRGs for physicians, American Association of Retired Persons, the New Jersey Business Coalition, our Auxiliary, the Governor, the President of the Senate, other legislators, our lobbyists, the reporters from newspapers, radio, television, and magazines, the Eye Institute of New Jersey, The National Burn Foundation, the State Board of Medical Examiners, and regional meetings on the status of PRO in New Jersey. I also moderated four television programs on professional liability, the physician fee freeze, the PRO, and The Academy of Medicine of New Jersey.

In short, I have been busy!

While it is relatively easy to document my activities, it is more difficult to assess the accomplishments of those activities. It is fair to say, however, that I flew the flag of the Medical Society of New Jersey, and I was received with respect and dignity befitting the office of the President of this very distinguished Medical Society. I was very proud to be your representative. I presented the position of the Medical Society on many issues, and I received the comments, statements, and positions regarding a great variety of matters of mutual interest which I have communicated into the organization of our Medical Society as seemed appropriate.

The major activities of the Medical Society these days center around our relationship with government, health care institutions, the media, the public, and our patients.

COST OF MEDICAL CARE

The single most compelling issue is the rising cost of medical care. While it is easy to measure cost, it is most difficult to measure quality of care. Therein lies

*Presented before the House of Delegates at the Annual Meeting, May 3, 1985, Lancaster, Pennsylvania.

part of our problem.

In an attempt to control the rising cost of medical care, political forces in government and management forces from industry are at work changing the structure of the health care system as we know it. The intended goals are to eliminate waste and unnecessary medical services, and make the entire system more efficient and cost effective while preserving the quality, availability, and access to needed medical services. Those are laudable goals and yet they add up to a very tall order!

With the capacity and the momentum now in our health care system, I believe we are on the verge of unprecedented progress in the eradication of diseases affecting mankind. To interfere with this could be a blunder of historic dimensions.

Our training in the art and science of medicine has prepared us well to provide the highest quality of medical care in the professional marketplace. The remarkable health care system in this country today attests to such a fact. Our training, however, has not prepared us adequately to deal with the forces of the commercial marketplace that are being brought to bear on the medical profession with increasing intensity by government, the business community, and the administrators of health care institutions in the attempt to address the issue of the rising cost of medical care. Consequently, we find ourselves caught between these forces and our patients.

We must stand together as never before. These new forces impact on different groups of physicians in different ways at different times and to different degrees. As a consequence, the response by physicians is piecemeal, isolated, uncoordinated, inadequate, and ineffective. And the effect is to divide and conquer.

For example, at one time it may be the ophthalmologists struggling with the issue of optometrists seeking legislation that would permit them to use drugs in the eye. At another time, it may be the primary care physicians attempting to hold the line on the licensure of physician assistants in New Jersey. We, therefore, must stand together and develop common ground regarding the multiplicity of issues that confront us. In unity, there is strength.

Today, the American people have the best health care system the world has ever known. More Americans receive more health care of a higher quality, have less disease, and are ill for shorter periods of time than ever before. Furthermore, they enjoy a higher quality of life, are more prosperous, are politically free, are physically safe, and life is more fulfilling than ever before. In short, all aspects of life are improving and at a faster rate.

CHANGING TIMES

In the face of all of that good news, however, there is a very somber mood throughout the medical profession. As I have traveled, I repeatedly have heard such comments as, "It isn't like it used to be "; "The fun and thrills are gone"; "It's a rat race, a jungle, a nightmare"; "I don't think I would do it again"; "I do not encourage my children to study medicine"; "I am considering retiring early"; "My dad sold shoes. That is looking better and better to me every day."

These are not isolated comments. I am hearing them with increasing frequency throughout the medical community. The volume and intensity of feeling adds up to a pervasive mood. It worries me! This tells me that physicians are frustrated to the point of being unable to deal with the problems they are facing. I think this could adversely impact on the way medicine is viewed in the future.

What is causing this mood of frustration? This malaise of the spirit? This group depression?

These are truly tumultuous and turbulent times. Change is everywhere. The old and familiar are coming apart at the seams. Tried and true methods are being challenged. New ways of doing things are being thrust upon us. The unfamiliar is suspect and threatening. We are unable to adjust. It is frustrating. We sense the quality of care is being sacrificed for cost considerations, and feel helpless to prevent it. We seem to be victims of our own success.

We were asked to provide the best medical care that could possibly be developed; and we did it. We are delivering it. Miracles now are the expected norm. Much of our work today is so effective as to appear miraculous. A lesser result often is considered to be below the norm.

Because of a perceived shortage, we were asked to train more physicians, and we did. Now we have an oversupply of physicians, and all of the competitive pressures that brings.

The increasing availability of sophisticated technology is giving physicians more effective tools than ever before for solving the complex problems encountered in modern medical practice. While such benefits are welcomed and even demanded, the additional costs are rejected as excessive and unwarranted.

More modern and conveniently located health care facilities are available than ever before. These now are perceived as excessive and creating excessive overhead costs in the provision of medical care.

Our technology has gone beyond our ethical and moral positions on many issues. With so much potentially beneficial technology now available, the dilemma of choosing between "doing all that you can" and "doing only that which is significantly beneficial" has become a frequent challenge in the lives of most physicians. Without clear and generally accepted guidelines, decision making in this context becomes an emotion-charged and threatening walk through an ethical and moral minefield.

The cost of medical care continues to rise, and yet there is no consensus as to what is enough medical care or what is enough money to be spent on medical care. Government and industry, that years ago agreed to pick up the tab and told physicians to do all that they can, no longer are happy with the cost, and are now doing everything that they possibly can to reduce services, and to shift the payment to patients. That is putting pressures on physicians such as they have never had before.

THE ROLE OF THE PHYSICIAN

The delivery of medical care is a very complex people problem. Doctors are experts in dealing with people on a one-on-one basis, in the traditional doctor/patient

relationship, but doctors are not experts in dealing with people in management and political settings. Doctors have had no formal training in either discipline, and traditionally have become involved only superficially if at all. Therein is a problem and therein is a solution.

Government and industry have teamed up to apply the tools of management and the tools of politics to the complex people problems in the provision of medical care. Those are two areas in which physicians are least prepared and least effective. The answer is simply to become effectively involved in both areas. We need to learn something about management, and we need to learn something about politics, and we need to practice both.

Now, are we to become professional managers? Are we to become professional politicians? No! I do not think so. We need to know the basic principles and procedures in both disciplines. We must develop a balance between medicine, politics, and management.

It is not a question of whether the manager works for the physician or the physician works for the manager or whether government should be involved at all. The real challenge is to develop a relationship that permits each to work cooperatively with the other while each does what each does best, in an atmosphere that fosters mutual respect, understanding, and effective cooperation.

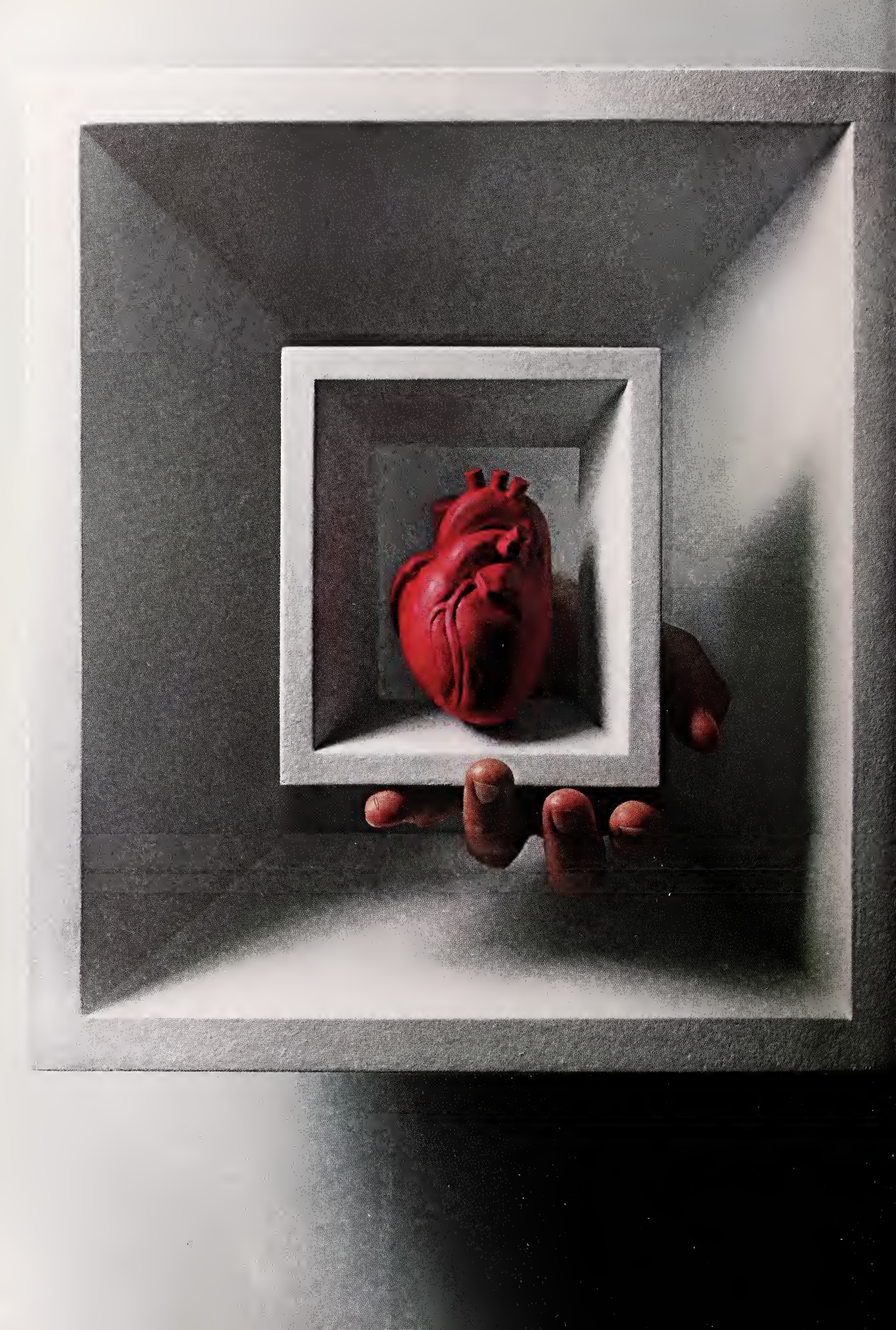
Then, the fun, thrills, and euphoria of the practice of medicine again will be there, and patients will be receiving the best possible medical care.

CONCLUSION

I have been very busy on your behalf. The major activities of the Medical Society center around our relationship with government and industry. The single most compelling issue we face is the rising cost of medical care. Political and management forces are literally changing the structure of the health care system as we have known it. Physicians caught between these forces and their patients feel frustrated and threatened. We need to become knowledgeable and skilled in the practice of management and politics, as well as medicine, for it is in these three arenas that the significant decisions regarding medical care are now being made. We ignore any one of the three at our peril.

I extend a very sincere thanks to those who served so diligently and effectively on the councils and committees of the Medical Society and to the members of the staff whose diligent, skillful, and competent work goes largely unobserved, and yet is absolutely essential to the smooth functioning of MSNJ.

And, finally, I thank all of you from the bottom of my heart for the honor and the privilege of serving as President of this very distinguished Medical Society. It has been the highlight of my professional life.



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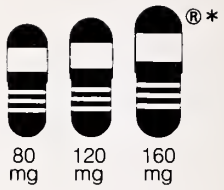
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CLINICAL PHARMACOLOGY. INDERAL is a nonselective beta-adrenergic receptor blocking agent possessing no other autonomic nervous system activity. It specifically competes with beta-adrenergic receptor stimulating agents for available receptor sites. When access to beta-receptor sites is blocked by INDERAL, the chronotropic, inotropic, and vasodilator responses to beta-adrenergic stimulation are decreased proportionately.

INDERAL LA Capsules (80, 120, and 160 mg) release propranolol HCl at a controlled and predictable rate. Peak blood levels following dosing with INDERAL LA occur at about 6 hours and the apparent plasma half-life is about 10 hours. When measured at steady state over a 24-hour period the areas under the propranolol plasma concentration-time curve (AUCs) for the capsules are approximately 60% to 65% of the AUCs for a comparable divided daily dose of INDERAL tablets. The lower AUCs for the capsules are due to greater hepatic metabolism of propranolol, resulting from the slower rate of absorption of propranolol. Over a twenty-four (24) hour period, blood levels are fairly constant for about twelve (12) hours then decline exponentially.

INDERAL LA should not be considered a simple mg for mg substitute for conventional propranolol and the blood levels achieved do not match (are lower than) those of two to four times daily dosing with the same dose. When changing to INDERAL LA from conventional propranolol, a possible need for retitration upwards should be considered especially to maintain effectiveness at the end of the dosing interval. In most clinical settings, however, such as hypertension or angina where there is little correlation between plasma levels and clinical effect, INDERAL LA has been therapeutically equivalent to the same mg dose of conventional INDERAL as assessed by 24-hour effects on blood pressure and on 24-hour exercise responses of heart rate, systolic pressure and rate pressure product. INDERAL LA can provide effective beta blockade for a 24-hour period.

The mechanism of the antihypertensive effect of INDERAL has not been established. Among the factors that may be involved in contributing to the antihypertensive action are (1) decreased cardiac output, (2) inhibition of renin release by the kidneys, and (3) diminution of tonic sympathetic nerve outflow from vasomotor centers in the brain. Although total peripheral resistance may increase initially, it readjusts to or below the pretreatment level with chronic use. Effects on plasma volume appear to be minor and somewhat variable. INDERAL has been shown to cause a small increase in serum potassium concentration when used in the treatment of hypertensive patients.

In angina pectoris, propranolol generally reduces the oxygen requirement of the heart at any given level of effort by blocking the catecholamine-induced increases in the heart rate, systolic blood pressure, and the velocity and extent of myocardial contraction. Propranolol may increase oxygen requirements by increasing left ventricular fiber length, end diastolic pressure and systolic ejection period. The net physiologic effect of beta-adrenergic blockade is usually advantageous and is manifested during exercise by delayed onset of pain and increased work capacity.

In dosages greater than required for beta blockade, INDERAL also exerts a quinidine-like or anesthetic-like membrane action which affects the cardiac action potential. The significance of the membrane action in the treatment of arrhythmias is uncertain.

The mechanism of the antimigraine effect of propranolol has not been established. Beta-adrenergic receptors have been demonstrated in the pial vessels of the brain.

Beta receptor blockade can be useful in conditions in which, because of pathologic or functional changes, sympathetic activity is detrimental to the patient. But there are also situations in which sympathetic stimulation is vital. For example, in patients with severely damaged hearts, adequate ventricular function is maintained by virtue of sympathetic drive which should be preserved. In the presence of AV block, greater than first degree, beta blockade may prevent the necessary facilitating effect of sympathetic activity on conduction. Beta blockade results in bronchial constriction by interfering with adrenergic bronchodilator activity which should be preserved in patients subject to bronchospasm.

Propranolol is not significantly dialyzable.
INDICATIONS AND USAGE. Hypertension: INDERAL LA is indicated in the management of hypertension; it may be used alone or used in combination with other antihypertensive agents, particularly a thiazide diuretic. INDERAL LA is not indicated in the management of hypertensive emergencies.

Angina Pectoris Due to Coronary Atherosclerosis: INDERAL LA is indicated for the long-term management of patients with angina pectoris.

Migraine: INDERAL LA is indicated for the prophylaxis of common migraine headache. The efficacy of propranolol in the treatment of a migraine attack that has started has not been established and propranolol is not indicated for such use.

Hypertrophic Subaortic Stenosis: INDERAL LA is useful in the management of hypertrophic subaortic stenosis, especially for treatment of exertional or other stress-induced angina, palpitations, and syncope. INDERAL LA also improves exercise performance. The effectiveness of propranolol hydrochloride in this disease appears to be due to a reduction of the elevated outflow pressure gradient which is exacerbated by beta-receptor stimulation. Clinical improvement may be temporary.
CONTRAINDICATIONS. INDERAL is contraindicated in 1) cardiogenic shock; 2) sinus bradycardia and greater than first degree block; 3) bronchial asthma; 4) congestive heart failure (see WARNINGS) unless the failure is secondary to a tachyarrhythmia treatable with INDERAL.
WARNINGS. CARDIAC FAILURE: Sympathetic stimulation may be a vital component supporting circulatory function in patients with congestive heart failure, and its inhibition by beta blockade may precipitate more severe failure. Although beta blockers should be avoided in overt congestive heart failure, if necessary, they can be used with close follow-up in patients with a history of failure who are well compensated and are receiving digitalis and diuretics. Beta-adrenergic blocking agents do not abolish the inotropic action of digitalis on heart muscle.

IN PATIENTS WITHOUT A HISTORY OF HEART FAILURE, continued use of beta blockers can, in some cases, lead to cardiac failure. Therefore, at the first sign or symptom of heart failure, the patient should be digitalized and/or treated with diuretics, and the response observed closely, or INDERAL should be discontinued (gradually, if possible).

IN PATIENTS WITH ANGINA PECTORIS, there have been reports of exacerbation of angina and, in some cases, myocardial infarction, following abrupt discontinuance of INDERAL therapy. Therefore, when discontinuance of INDERAL is planned the dosage should be gradually reduced over at least a few weeks, and the patient should be cautioned against interruption or cessation of therapy without the physician's advice. If INDERAL therapy is interrupted and exacerbation of angina occurs, it usually is advisable to reinstitute INDERAL therapy and take other measures appropriate for the management of unstable angina pectoris. Since coronary artery disease may be unrecognized, it may be prudent to follow the above advice in patients considered at risk of having occult atherosclerotic heart disease who are given propranolol for other indications.

Nonallergic Bronchospasm (e.g., chronic bronchitis, emphysema)—PATIENTS WITH BRONCHOSPASTIC DISEASES SHOULD IN GENERAL NOT RECEIVE BETA BLOCKERS. INDERAL should be administered with caution since it may block bronchodilation produced by endogenous and exogenous catecholamine stimulation of beta receptors.

MAJOR SURGERY: The necessity or desirability of withdrawal of beta-blocking therapy prior to major surgery is controversial. It should be noted, however, that the impaired ability of the heart to respond to reflex adrenergic stimuli may augment the risks of general anesthesia and surgical procedures.

INDERAL (propranolol HCl), like other beta blockers, is a competitive inhibitor of beta-receptor agonists and its effects can be reversed by administration of such agents, e.g., dobutamine or isoproterenol. However, such patients may be subject to protracted severe hypotension. Difficulty in starting and maintaining the heartbeat has also been reported with beta blockers.

DIABETES AND HYPOGLYCEMIA: Beta-adrenergic blockade may prevent the appearance of certain premonitory signs and symptoms (pulse rate and pressure changes) of acute hypoglycemia in labile insulin-dependent diabetes. In these patients, it may be more difficult to adjust the dosage of insulin.

THYROTOXICOSIS: Beta blockade may mask certain clinical signs of hyperthyroidism. Therefore, abrupt withdrawal of propranolol may be followed by an exacerbation of symptoms of hyperthyroidism, including thyroid storm. Propranolol does not distort thyroid function tests.

IN PATIENTS WITH WOLFF-PARKINSON-WHITE SYNDROME, several cases have been reported in which, after propranolol, the tachycardia was replaced by a severe bradycardia requiring a demand pacemaker. In one case this resulted after an initial dose of 5 mg propranolol.
PRECAUTIONS. *General:* Propranolol should be used with caution in patients with impaired hepatic or renal function. INDERAL is not indicated for the treatment of hypertensive emergencies.

Beta adrenoreceptor blockade can cause reduction of intraocular pressure. Patients should be told that INDERAL may interfere with the glaucoma screening test. Withdrawal may lead to a return of increased intraocular pressure.

Clinical Laboratory Tests. Elevated blood urea levels in patients with severe heart disease, elevated serum transaminase, alkaline phosphatase, lactate dehydrogenase.

DRUG INTERACTIONS: Patients receiving catecholamine-depleting drugs such as reserpine should be closely observed if INDERAL is administered. The added catecholamine-blocking action may produce an excessive reduction of resting sympathetic nervous activity which may result in hypotension, marked bradycardia, vertigo, syncopal attacks, or orthostatic hypotension.

Carcinogenesis, Mutagenesis, Impairment of Fertility: Long-term studies in animals have been conducted to evaluate toxic effects and carcinogenic potential. In 18-month studies in both rats and mice, employing doses up to 150 mg/kg/day, there was no evidence of significant drug-induced toxicity. There were no drug-related tumorigenic effects at any of the dosage levels. Reproductive studies in animals did not show any impairment of fertility that was attributable to the drug.

Pregnancy: Pregnancy Category C. INDERAL has been shown to be embryotoxic in animal studies at doses about 10 times greater than the maximum recommended human dose.

There are no adequate and well-controlled studies in pregnant women. INDERAL should be used during pregnancy only if the potential benefit justifies the potential risk to the fetus.

Nursing Mothers. INDERAL is excreted in human milk. Caution should be exercised when INDERAL is administered to a nursing woman.

Pediatric Use: Safety and effectiveness in children have not been established.
ADVERSE REACTIONS. Most adverse effects have been mild and transient and have rarely required the withdrawal of therapy.

Cardiovascular: bradycardia; congestive heart failure; intensification of AV block; hypotension; paresthesia of hands; thrombocytopenic purpura, arterial insufficiency, usually of the Raynaud type.

Central Nervous System: lightheadedness; mental depression manifested by insomnia, lassitude, weakness, fatigue, reversible mental depression progressing to catatonia; visual disturbances; hallucinations; an acute reversible syndrome characterized by disorientation for time and place, short-term memory loss, emotional lability, slightly clouded sensorium, and decreased performance on neuropsychometrics.

Gastrointestinal: nausea, vomiting, epigastric distress, abdominal cramping, diarrhea, constipation, mesenteric arterial thrombosis, ischemic colitis.

Allergic: pharyngitis and agranulocytosis, erythematous rash, fever combined with aching and sore throat, laryngospasm and respiratory distress.

Respiratory: bronchospasm.

Hematologic: agranulocytosis, nonthrombocytopenic purpura, thrombocytopenic purpura.

Auto-Immune: In extremely rare instances, systemic lupus erythematosus has been reported.

Miscellaneous: alopecia, LE-like reactions, psoriasiform rashes, dry eyes, male impotence, and Peyronie's disease have been reported rarely. Oculomucocutaneous reactions involving the skin, serous membranes and conjunctivae reported for a beta blocker (practolol) have not been associated with propranolol.
DOSAGE AND ADMINISTRATION. INDERAL LA provides propranolol hydrochloride in a sustained-release capsule for administration once daily. If patients are switched from INDERAL tablets to INDERAL LA capsules, care should be taken to assure that the desired therapeutic effect is maintained. INDERAL LA should not be considered a simple mg for mg substitute for INDERAL. INDERAL LA has different kinetics and produces lower blood levels. Retitration may be necessary especially to maintain effectiveness at the end of the 24-hour dosing interval.

HYPERTENSION—*Dosage must be individualized.* The usual initial dosage is 80 mg INDERAL LA once daily, whether used alone or added to a diuretic. The dosage may be increased to 120 mg once daily or higher until adequate blood-pressure control is achieved. The usual maintenance dosage is 120 to 160 mg once daily. In some instances a dosage of 640 mg may be required. The time needed for full hypertensive response to a given dosage is variable and may range from a few days to several weeks.

ANGINA PECTORIS—*Dosage must be individualized.* Starting with 80 mg INDERAL LA once daily, dosage should be gradually increased at three to seven day intervals until optimum response is obtained. Although individual patients may respond at any dosage level, the average optimum dosage appears to be 160 mg once daily. In angina pectoris, the value and safety of dosage exceeding 320 mg per day have not been established.

If treatment is to be discontinued, reduce dosage gradually over a period of a few weeks (see WARNINGS).

MIGRAINE—*Dosage must be individualized.* The initial oral dose is 80 mg INDERAL LA once daily. The usual effective dose range is 160-240 mg once daily. The dosage may be increased gradually to achieve optimum migraine prophylaxis. If a satisfactory response is not obtained within four to six weeks after reaching the maximum dose, INDERAL LA therapy should be discontinued. It may be advisable to withdraw the drug gradually over a period of several weeks.

HYPERTROPHIC SUBAORTIC STENOSIS—80-160 mg INDERAL LA once daily.

PEDIATRIC DOSAGE—At this time the data on the use of the drug in this age group are too limited to permit adequate directions for use.

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Ayerst AYERST LABORATORIES
New York, N.Y. 10017

Aplastic Anemia: Pathophysiology and Management

Harvey Rothberg, M.D., Princeton*

The pathophysiology and current management of aplastic anemia are reviewed. The case of a 70-year-old woman with severe aplastic anemia and prolonged remission after antithymocyte globulin is presented.

Aplastic anemia is characterized by peripheral blood pancytopenia with hypoplasia of the bone marrow. The normal blood-forming cells of the bone marrow are replaced by fat, and the hypoplasia of normal marrow elements is not associated with an increase of immature cells (as in leukemia) or of reticulum (as in myeloproliferative disease). Several comprehensive reviews on the subject recently have been published.[1-5]

Aplastic anemia is a pathophysiologic state of diverse etiologies. The hypoplastic marrow which is its hallmark may be congenital (as in Fanconi's anemia) or acquired (due to drugs, chemical exposure, radiation, infection, or another disease such as paroxysmal nocturnal hemoglobinuria). Most commonly, it is idiopathic. The most common offending drugs are chloramphenicol, phenylbutazone, phenytoin and other anticonvulsants, gold salts, sulfonamides, oral hypoglycemic agents, antithyroid drugs, phenothiazines, aspirin, and cytotoxic cancer chemotherapeutic agents, particularly the alkylating agents such as busulfan. Toxic chemicals such as benzene, lindane, and chlordane have been implicated.

Aplastic anemia is thus a spectrum of disorders, with diverse etiologies, pathogenetic mechanisms, and degrees of severity. Currently, criteria for defining severe aplastic anemia are: marrow with less than 25 percent normal cellularity and at least two of the following—granulocytes less than 500/mm^3, platelets less than 20,000/mm^3, and anemia with corrected reticulocyte count less than 1 percent.

The prognosis of aplastic anemia depends on the severity of the disease. In Lynch's series, 90 percent of patients classified as having severe disease died within four months of diagnosis, but 80 percent with mild disease survived four months.[7] Some patients with mild disease eventually recover, at least partially. In the past 15 years, the outlook for severe aplastic anemia has improved considerably, thanks to advances in transfusion therapy, antibiotics, bone marrow transplantation, and immunotherapy.

In this paper, I report the successful treatment of severe aplastic anemia in an elderly woman with antithymocyte globulin, and discuss the rationale for treatment.

CASE REPORT

A 70-year-old widow developed progressive weakness, fatigue, and easy bruising in May 1981. She was found to be pancytopenic and was hospitalized in June

*Dr. Rothberg is Attending Physician, The Medical Center at Princeton, and Clinical Professor of Medicine, UMDNJ-Rutgers Medical School. Correspondence may be addressed to Dr. Rothberg, Princeton Medical Group, Medical Arts Bldg., Suite B, 253 Witherspoon Street, Princeton, NJ 08540.

1981. She was very pale and had purpura. Hemoglobin was 6.7 gm/dl, hematocrit 19, WBC 2.1 with 20% neutrophils, 75% lymphocytes, 2% monocytes, and 3% eosinophils; platelet count was 81,000/mm^3. Reticulocyte count was 1.2%. Bone marrow was hypoplastic with marked increase in fat cells and focal aggregations of lymphocytes and plasma cells. Blood chemistries, chest x-ray, and liver-spleen scan were normal. The patient was transfused with 4 units of packed cells and 8 units of platelets, and was given prednisone, 40 to 60 mg daily. In September 1981, oxymethalone (Anadrol®) 50 mg t.i.d., was added and continued for five months. Despite these medications, she required frequent transfusions, an average of 5 units of washed packed cells and 11 units of platelets per month during the period September 1981 through March 1982. Hemoglobin fell to about 8 gm/dl before transfusions and rose to about 10.5 gm/dl after transfusions. Marked weakness, fatigue, and extensive purpura persisted. Platelet counts averaged 10,000/mm^3. Diuretics were required for congestive heart failure.

On March 5, 1982, the patient was hospitalized after two weeks of progressive dyspnea and weakness. Hemoglobin was 7.4 gm/dl, hematocrit 22, WBC 3,800 with 20% bands, 64% segmented neutrophils, 10% lymphocytes, 5% monocytes, and 1% myelocytes. Platelet count was 8,000/mm^3. Reticulocyte count was 2.8%. Blood chemistries were normal except for slightly elevated bilirubin and serum LDH. Chest x-ray showed a small right pleural effusion. Bone marrow (Figure 1) was hypocellular and fatty, with marked myeloid hypoplasia and absence of megakaryocytes. Initially, the patient was treated with transfusions. Subsequently, she developed fever of 101.5°F and left shoulder pain. Multiple blood cultures yielded coagulase-positive *Staphylococci*, and the patient improved progressively on oxacillin 8 gm daily for 14 days. After the patient recovered from this episode of septicemia, antithymocyte globulin therapy (Atgam®, Upjohn) was instituted for the aplastic anemia. Oxymethalone had been discontinued; prednisone was maintained at 10 mg/day; 900 mg of antithymocyte globulin (ATG) was given in a 20-hour intravenous infusion each day for 10 days. Reactions included low-grade fever of 101.4°F and a rash over the knees and back; intravenous methylprednisolone was helpful in controlling the fever and skin rash. The platelet count remained low, generally between 5,000 and 10,000/mm^3. There was extensive purpura during the course of hospitalization as well as "coffee grounds" vomitus and profuse rectal bleeding on one occasion. A total of 8 platelet transfusions of 6 units each were given and 8 units of washed packed red blood cells. In the final week of hospitalization, the patient's hemoglobin stabilized in the 11 gm range; the reticulocyte count rose to 6.4% The WBC count averaged about 3,000 and later rose to 6,400. By the time of hospital discharge, April 16, 1982, she had been given 43 units of washed packed red cells and 90 units of platelets, over a period of ten months.

No further transfusions were required. By June 1982, three months after ATG treatment, the patient's hemoglobin was 10.6 gm, WBC 4,200, and platelet count 27,000/mm^3. In August 1983, she sustained a

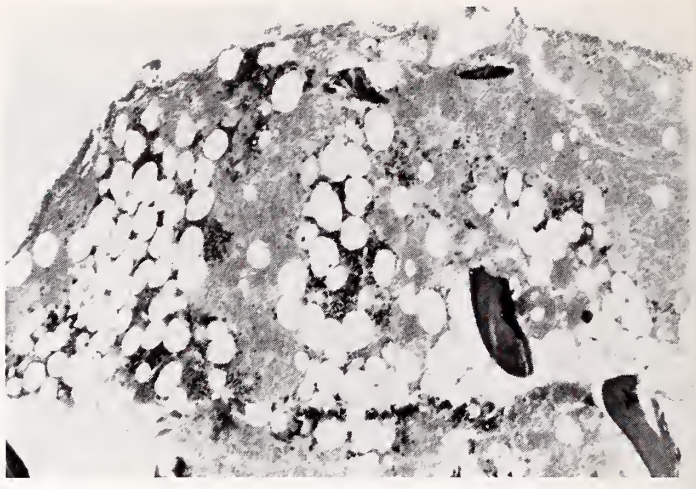


Figure 1—Bone marrow, March 1982 (x 160).

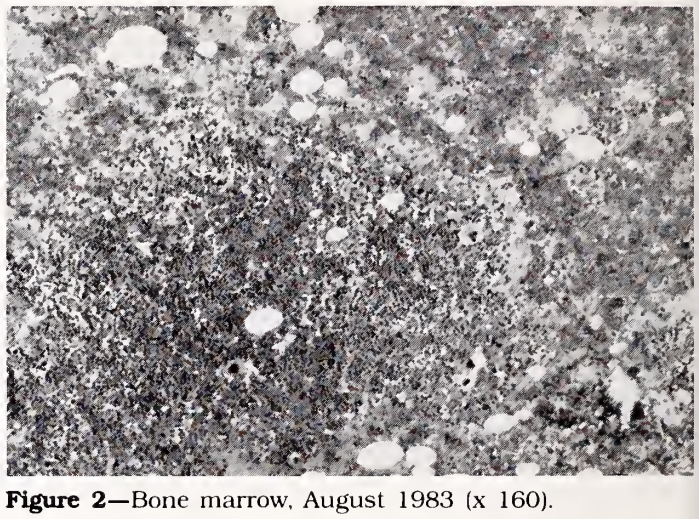


Figure 2—Bone marrow, August 1983 (x 160).

subcapital fracture of the left hip. When hospitalized, her hemoglobin was 9.7 gm, WBC 3,700, and platelet count 50,000/mm^3. Bone marrow (Figure 2) was markedly hypercellular, with megaloblastoid erythroid hyperplasia. Myelopoiesis was normal, but megakaryocytes were slightly decreased. Plasma cells were slightly increased. A Knowles pin was placed in the patient's left hip during a 30-minute operative procedure. No blood was given during this operation or subsequently, and the patient made an excellent convalescence. When last examined in May 1984, her hemoglobin was 10.9 gm, WBC 5,300 with normal differential, and platelet count was 80,000/mm^3; the MCV is 105/mm.^{3} She feels well and her only medications are digoxin and propanolol for control of atrial fibrillation.

The dramatic cessation of transfusion requirement coincident with the administration of antithymocyte globulin clearly indicates the beneficial effect of the ATG treatment in this patient. It is of interest that the rise in platelet count was much slower and remains incomplete. The effect on the peripheral WBC count was uncertain. Confirmation of the therapeutic efficacy of the ATG treatment can be seen in the transformation of the previously hypoplastic marrow to an abundantly cellular one.

DISCUSSION

The pathogenesis of aplastic anemia is not well understood. Several mechanisms may be involved: 1) a primary disorder of hematopoietic stem cells; 2) a defect in the supporting microenvironment; 3) an ab-

normality of the regulators of hematopoiesis; and 4) immune suppression of hematopoiesis.[3,9-11] There is clinical or experimental evidence to suppot the validity of each of these mechanisms.

A decrease in hematopoietic stem cells has been observed in mice after radiation injury as well as in the bone marrow failure induced by busulfan. In man, the association of aplastic anemia with exposure to toxic chemicals or ionizing radiation supports the notion that a deficiency of pluripotential hematopoietic stem cell compartment is a major factor in human aplastic anemia. In vitro culture studies from the marrow of patients with aplastic anemia have repeatedly shown gross deficiencies in the number of committed stem cells (CFU-C) as measured by growth of marrow cells in agar-gel culture.[12,13] Perhaps the most convincing evidence to support this concept is the high rate of successful engraftment with resulting hematologic recovery in patients with aplastic anemia who are given transplants of normal marrow cells.

An alternative hypothesis emphasizes the role of damage to the marrow microenvironment.[14] High dosage of radiation can cause irreversible damage to the marrow circulation so that the radiated marrow cannot support normal hematopoiesis. The congenitally anemic Sl/Sl^d mouse cannot be cured by infusion of normal compatible marrow cells, apparently because it has a defective marrow stromal or vascular environment. In acquired aplastic anemia in man, microarchitectural changes such as fibrinous exudates, hemorrhages, and lymphoid infiltrates often are present, but they do not interfere with engraftment of transplanted marrow. Therefore, it appears that microenvironmental damage generally is not the major etiologic factor in human aplastic anemia.

Another possibility is an abnormality of the normal hematopoietic control mechanisms. Erythropoiesis normally is governed at least in part by erythropoietin, an α-globulin produced in the hypoxic kidney and capable of stimulating stem cells towards erythroid maturation. Granulopoiesis is dependent on a colony-stimulating factor (CSF) that is secreted by monocytes and probably regulated by prostaglandins. Measurements of erythropoietin production in aplastic anemia patients show it to be either normal or appropriately elevated, indicating integrity of the control mechanism.[15] As noted above, most patients with aplastic anemia have markedly deficient numbers of committed stem cells (CFU-C), but the regulatory factor or colony-stimulating activity (CSF) is normal or elevated.

The final possibility is immune suppression of hematopoiesis. Antibodies capable of inhibiting hematopoiesis in vitro have been found in about 25 percent of patients with aplastic anemia. However, such antibodies have been seen in a similar portion of multiple transfused patients without bone marrow failure, so their presence in most aplastic anemia patients may be transfusion related and not of etiologic significance.[4] The exception to this may be the rare patient with lupus erythematosus or cryoglobulinemia and a hematopoiesis-inhibiting antibody causing bone marrow hypoplasia.[16]

There is more substantial evidence to support the concept of cell-mediated suppression of hematopoiesis. Kagan, Ascensao et al. used the technique of coculturing marrow cells of aplastic anemia patients with marrow cells from normal donors, and found that the lymphocytes of some aplastic anemia patients inhibited the colony-forming ability of normal marrow cells.[17,18] Hoffman found that peripheral blood lymphocytes of aplastic anemia patients had a similar inhibitory effect on erythroid colony formation.[19] While these results have been confirmed, it appears that erythropoiesis-suppressing lymphocytes occur mainly in patients who previously have been transfused, suggesting that, as in the case of inhibiting serum antibody, the suppressor lymphocytes often are a consequence of transfusion.

Observations on the effect of immunosuppressive drugs lend further support to the concept of an etiologic role of suppressor lymphocytes. For example, Baran, Griner, and Klemperer showed that cyclophosphamide therapy might be followed by complete remission of aplastic anemia.[20] Further evidence comes from bone marrow transplantation in identical twins.[4] By 1981, 22 patients with aplastic anemia had received bone marrow transplants from their identical twins; only half the patients improved after simple marrow infusion. The other half recovered only when a second marrow infusion was preceded by immunosuppressive conditioning of the recipient with cyclophosphamide, alone or with radiation therapy. There are several reports of patients with severe aplastic anemia who have had repopulation of the bone marrow by autologous cells with partial hematologic recovery following cyclophosphamide and unsuccessful marrow transplantation.[5] These experiences suggest that some cases of aplastic anemia are due to active suppression of hematopoiesis by cells, presumably lymphocytes, that can be inhibited by a cytotoxic drug.

Corticosteroids also are capable of depleting T lymphocytes from the bone marrow. Leukopenic patients of diverse etiologies (including congenital and acquired neutropenia, rheumatoid arthritis, and myelodysplastic syndrome) may have hemopoietic inhibitory cells in their marrows. When they do, generally they respond to steroid therapy with increased granulopoiesis. Only 2 of 27 aplastic anemia patients in Bagby's series could be demonstrated to have such hemopoietic inhibitory cells; one of these responded to prednisone therapy.[21]

The efficacy of antilymphocyte globulin (ALG) and antithymocyte globulin (ATG) in the therapy of aplastic anemia lends further support to the concept that suppressor lymphocytes are important in the pathogenesis of the disease, at least in some cases.

THERAPEUTIC MEASURES

The development of safe and effective transfusion therapy with the capacity to transfuse platelets and especially erythrocytes has been the cornerstone of the modern management of patients with hypoplastic marrow disorders. Leukocyte transfusions have played a much less important role, but antibiotics have provided effective means of combating life-threatening infections in the leukopenic patient. Despite the advances in antibiotics and in transfusion therapy, aplastic anemia patients continue to have marked shortening of life expectancy unless their marrow

hypoplasia can be remedied with return of peripheral blood counts towards normal values.

A variety of hematinic substances, including iron, folic acid, vitamin B_{12}, pyridoxine, and cobalt, have been tested clinically and found to be ineffective. Lithium enhances CSF production by monocytes and stimulates granulopoiesis in some leukopenic patients. Blum reported marked improvement in a patient with aplastic anemia following lithium carbonate therapy; this agent deserves further evaluation.[22]

Corticosteroid Therapy. Favorable responses in early reports on corticosteroid therapy probably were due to inclusion of patients with mild aplastic anemia who may improve spontaneously. Bacigalupo reported that massive doses of methylprednisolone (initial dose 20 mg/Kg/day) led to complete remission in 5 of 20 patients with severe aplastic anemia.[23] But in a large cooperative study in Europe, prolonged corticosteroid therapy (about 1 mg/Kg/day) was associated with shortened survival time, especially in leukopenic patients.[24] The danger of infection and other undesirable effects led most authorities to conclude that corticosteroid therapy is contraindicated in severe aplastic anemia.

Androgen Therapy. Androgen therapy is controversial. It has been known that males have higher hemoglobins than females and male puberty is associated with a rise in hemoglobin level. In 1953, Kennedy reported that testosterone often induces erythrocytosis in women with breast cancer.[25] In 1961, Shahidi and Diamond reported testosterone-induced remissions in children with acquired and congenital aplastic anemia[26] and Sanchez-Medal described similar results in adults.[27] The actions of androgens include both enhancement of erythropoietin production and direct stimulation of marrow stem cells, possibly by increasing their sensitivity to erythropoietin.

Later, androgens became established as effective stimulants of erythropoiesis in patients with myelofibrosis and refractory anemia and have been used widely in aplastic anemia patients, with favorable responses.[28] Occasional patients require continued androgen therapy to maintain the hematologic response. However, in a controlled study of 111 patients with severe aplastic anemia by the Aplastic Anemia Study Group, no difference in survival could be demonstrated whether patients received intramuscular or oral androgens or not. In all three groups, only 50 percent survived four months, and only about a third were alive at the end of a year.[6] In the European cooperative study of 352 cases, however, definite benefit from androgen therapy was reported.[24] It is noteworthy that abnormalities of liver function developed in 35 percent of the patients in this study, regardless of the androgen used.

Different results among the androgen trials may be due to case selection. Occasional patients with mild to moderate hypoplastic anemia (with some residual hematopoietic reserve) may respond to androgen therapy, but patients with severe aplastic anemia are unlikely to benefit. When obtained, the beneficial effect of androgen therapy is confined to erythropoiesis; platelet and white blood cell numbers generally are not affected.

Splenectomy and plasmapheresis also should be mentioned. Splenectomy occasionally decreases transfusion requirement in aplastic patients with hypersplenism, but it is potentially dangerous because it may increase susceptibility to infection, especially in the severely leukopenic patient.[29] Plasmapheresis may benefit the rare patient with an autoantibody capable of inhibiting hematopoiesis.[11]

Bone Marrow Transplantation. This has become established as the most effective therapy for young patients with severe aplastic anemia.[4,5,30-32] However, there are major problems with marrow transplantation. First, the patient must have a histocompatible donor (a sibling donor is much preferred). If a patient has only one sibling, there is only a 25 percent chance that he is histocompatible; in a family of three children, there is a 30 to 40 percent chance of having an HLA-identical sibling donor. Second, the procedure must be performed in a transplantation center with an experienced team and extensive support facilities. Third is the problem of graft rejection, which may occur even with grafts from HLA-identical sibling donors. This once very frequent outcome of marrow transplantation can be reduced to about 40 percent of cases by preconditioning the patient with cyclophosphamide; if the patient also is given either total body radiation therapy or an infusion of peripheral blood leukocytes (buffy coat) from the donor, the incidence of graft rejection is reduced to about 10 percent. An especially important observation is the much higher incidence of graft rejection in patients who have had blood transfusions prior to receiving marrow transplantation. Since the vast majority of patients arrive at marrow transplantation centers having had multiple transfusions, it has become common practice to infuse such patients with donor buffy coat cells in order to facilitate engraftment of the transplanted marrow.[33]

Graft-versus-host disease (GVHD), caused by the reaction of donor T-lymphocytes to recipient tissues, occurs in about 40 or 50 percent of marrow recipients, and is lethal in about 10 percent. Major features of acute GVHD are dermatitis, hepatitis, gastroenteritis, and infections. Acute GVHD may be treated with methotrexate, corticosteroids, and antithymocyte globulin, and may be prevented by methotrexate or cyclosporin A. Chronic GVHD exhibits scleroderma-like features associated with immune deficiency and susceptibility to bacterial infection; corticosteroids and azathioprene have been helpful in management.

Interstitial pneumonia occurs in about 30 percent of recipients of bone marrow transplants. Half of the cases are associated with cytomegalovirus; other causes include herpes viruses and *Pneumocystis carinii*. Cytomegalovirus pneumonia has an 80 percent mortality, and now is the most common cause of death in transplant recipients. Infections of all types are a major problem in patients following marrow transplantation: in the first few months, they generally are bacterial or fungal and are related to granulocytopenia; later, infections are viral and related to profound immune deficiency.

Finally, the cost of a bone marrow transplantation is $80,000 or more, although the charges may be much less if major complications are avoided and the patient is hospitalized for less than a month. Fortunately, now that bone marrow transplantation is an accepted ther-

apy, third-party payers are covering much of the expense in many cases.

Despite all the problems, most centers now report 40 to 60 percent one- to two-year disease-free survivals in patients with aplastic anemia following marrow transplantation. Age is a major determinant of outcome: among patients less than 30 years of age, about 80 percent survive; in the 30- to 50-age group, only about 50 percent survive; and, among patients older than 50, the mortality is prohibitive.[5] Another factor is previous transfusion status: despite buffy coat treatment, the long-term survival of patients who have had previous transfusions substantially is less than that of the nontransfused patients.[30] But the overall results are good, and early bone marrow transplantation now is considered to be the therapy of choice for young patients with severe aplastic anemia, provided they have an HLA-identical sibling available as a marrow donor.[31,32]

For the 60 or 70 percent of patients with severe aplastic anemia who lack an HLA-identical sibling marrow donor, alternative sources of hematopoietic stem cells for transplantation can be considered. These include nonsibling family donors (disappointing), unrelated donors (generally unsuccessful, even when HLA-identical), and various experimental sources (T-cell depleted histoincompatible marrow, fetal liver cells, and possibly marrow tissue cultures).[4,31]

Immunosuppressive Therapy. Cyclophosphamide is theoretically interesting as a means of destroying hematopoiesis-suppressing lymphocytes, but in practice it has been disappointing: Griner found only four remissions among 73 aplastic anemia patients treated with cyclophosphamide. The use of this agent probably is unjustified unless the patient can be demonstrated to have immune-mediated aplasia which is unresponsive to other measures.[34]

Antilymphocyte globulin is a more effective form of immunosuppressive therapy. The use of an antilymphocyte serum, or ALG, was first reported by Mathé, who used it as an adjunct to bone marrow transplantation.[35] These results were expanded by Speck in Basle and his colleagues in France and the Netherlands who used a commercial equine antihuman thoracic duct lymphocyte serum.[36] In 1981, Speck reported a 69 percent one-year survival in patients with aplastic anemia treated with ALG; 63 percent of whom no longer required transfusions.[37] However, it was noted that the hematologic recovery achieved with ALG generally was less complete than that following bone marrow transplantation. In the United States, a prospective randomized trial was conducted by the Aplastic Anemia Study Group.[38] Twenty-nine patients with severe aplastic anemia were given androgen, HLA-haploidentical marrow, and ALG, 13 control patients were given only androgen and supportive care. Of the patients given ALG, 76 percent were alive after two years, compared with only 31 percent of the control group. The administration of ALG was associated with considerable toxicity: fever in all cases, chills in 77 percent, thrombocytopenia in 87 percent, serum sickness in 57 percent, hypotension in 43 percent, hemolysis in 17 percent, and anaphylaxis in 10 percent.

Recent trials have used antithymocyte globulin (ATG) prepared from horses immunized with single cell suspensions of human thymocytes. Among Jansen's 20 patients treated with ATG in Leiden: 7 (35 percent) had good responses and were rendered free of the need for transfusions.[39] At least two recent studies have omitted concomitant androgen therapy. At ULCA, 11 of 21 patients given ATG had sustained improvement, compared with none of 21 control patients who received supportive care alone.[41] At the University of Minnesota, Miller et al. reported remissions in 10 of 19 patients with severe aplastic anemia treated with ATG.[42] Thus, ATG has a major established role in severe aplastic anemia, supporting the concept that suppressor lymphocytes are important in the pathogenesis of the disease, at least in some cases.[43]

CONCLUSION

Given the array of treatment methods, what guidelines can be provided for practitioners confronted with a patient with aplastic anemia? It appears that androgens are of limited value in severe aplastic anemia, and that delay in marrow transplantation leads to increased morbidity and lessened likelihood of success. Therefore, as soon as the diagnosis of severe aplastic anemia is made, young and middle-aged patients should have HLA typing, and their relatives should be tested for histocompatibility. The period of observation before transplantation should be limited to three to four weeks. During this period, the course of the patient's illness can be observed, and androgens, possibly with corticosteroid, can be given. Transfusions should be limited and avoided if possible. Patients with severe aplastic anemia having identical twins available as donors should be marrow-transplanted without delay.

Antithymocyte globulin is a valuable addition to the therapy of aplastic anemia.

Antithymocyte globulin now offers an acceptable alternative for patients greater than age 40 or those without a suitable donor. This approach may be of particular value in the multiply transfused patient. Further study may provide more information as to the mode of action of such therapy, how best to administer it, and how to select the patients who are most likely to respond.

SUMMARY

The pathophysiology and current management of aplastic anemia are reviewed. The case of a 70-year-old woman with severe aplastic anemia and prolonged remission after antithymocyte globulin (ATG) is presented. ATG is a valuable addition to the therapy of aplastic anemia.

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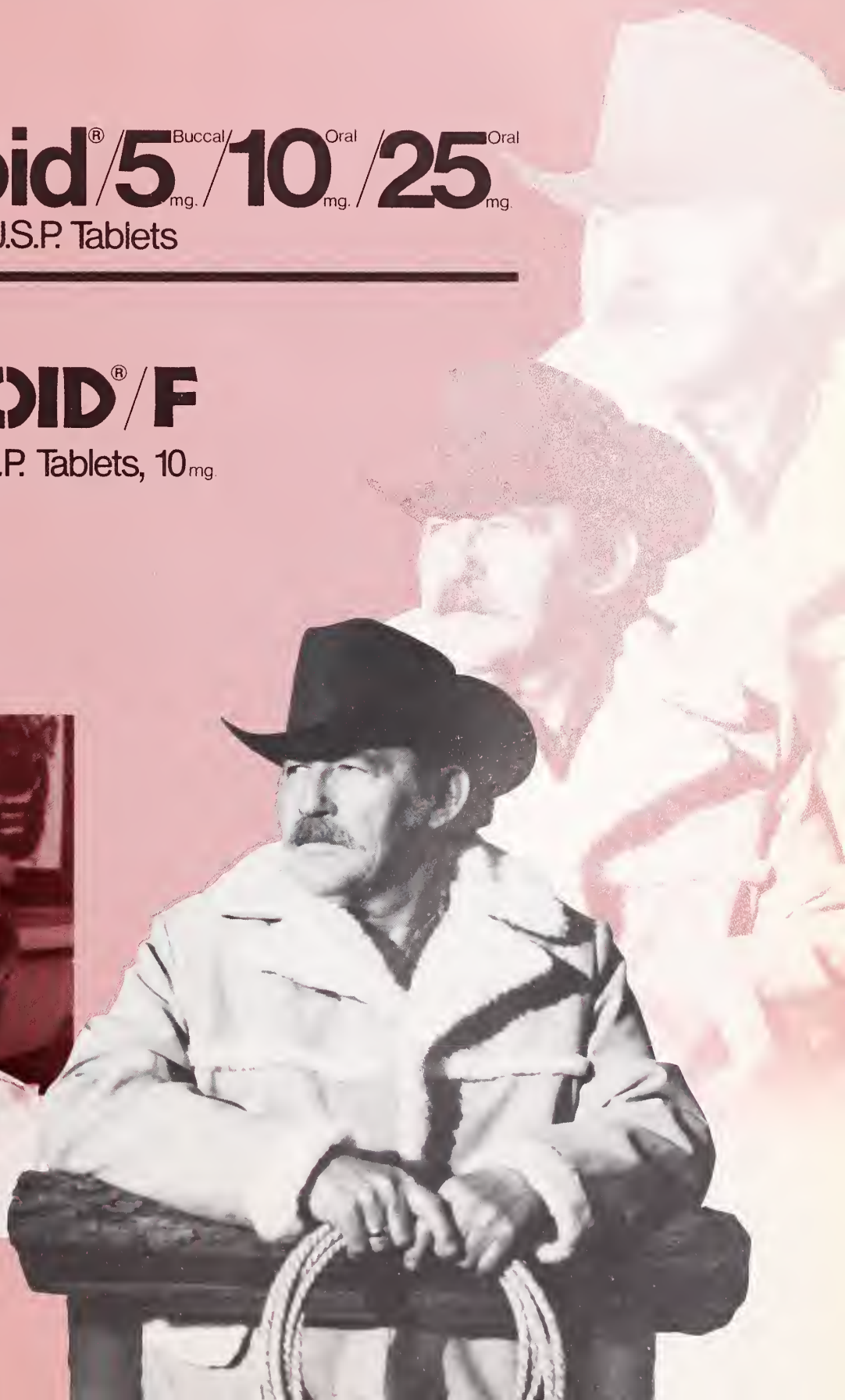
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An Approach to Identification of Cine Coronary Anatomy

Lloyd Spindell, M.D., Newark*

The method of understanding cine coronary anatomy is based on the concept of the "circle" of the atrioventricular sulcus and the "U" segment of the interventricular groove, which serve as cardiac surface markers. The effect of patient position and x-ray beam direction on the projection of the "circle" and the "U" segment is shown schematically.

In 1970, Daves described the advantage of the "loop" and "circle" concept as a learning aid in understanding coronary anatomy.[1] The interval since then has witnessed not only an unusual increase in the number of coronary arteriograms, but also a broader interest among various physicians. This paper is an expansion of the initial brief description of the coronary circulation by Daves and is directed to the nonradiologist who wishes to understand the unique form of coronary anatomy as presented on cineangiography.

The major coronary arteries and their large branches are predominantly surface vessels and lend themselves to map-like representation. However, unlike a road map of routes which has two-dimensional representation on paper, the cine cardiac road map is more complex because the opacified coronary vessels that are projected onto each cine frame surround a three-dimensional cardiac structure frequently resulting in superimposition of some of the coronary arterial segments. Fortunately, there are two major surface markers of the heart which are approximately geometrical and which can aid the new viewer. These are the "circle" and the "U" segment.

THE CIRCLE

The schematics of the heart which assist in the identification of the coronary arteries are shown in Figures 1, 2, 3, 4, and 5. The first of the two cardiac surface markers is the atrioventricular sulcus (AVS) which is approximately circular in configuration and may be considered as composed of right and left semicircles (RS and LS) or of right and left atrioventricular sulci, respectively Rt AVS and Lt AVS. Figure 1 reveals the heart as it might be visualized with the patient in a mild radiographic right anterior oblique position (RAO). In this position, the patient's right anterior chest is slightly closer to the imaging device than the patient's left side and results in the cardiac apex being turned slightly away from the image intensifier surface. An imaginary plane ABCD is shown, which is coincident with the AVS or the RS and LS. The plane ABCD intersects the aortic root and the inferior vena cava, demarcating the atria on one side of the AVS and the ventricles on the other side of the AVS (Figure 1).

In the full frontal or posteroanterior position (PA), the visualized surface of plane ABCD faces downward, frontally, and to the patient's left (Figure 2). If the patient is rotated into a 45° RAO position, with the shoulder even closer to the imaging device than shown in Figure 1, the right and left AVS or semicircles become superimposed and plane ABCD is seen on end

*Dr. Spindell is Attending Radiologist, Newark Beth Israel Medical Center. Correspondence may be addressed to Dr. Spindell, Newark Beth Israel Medical Center, 201 Lyons Avenue, Newark NJ 07112.

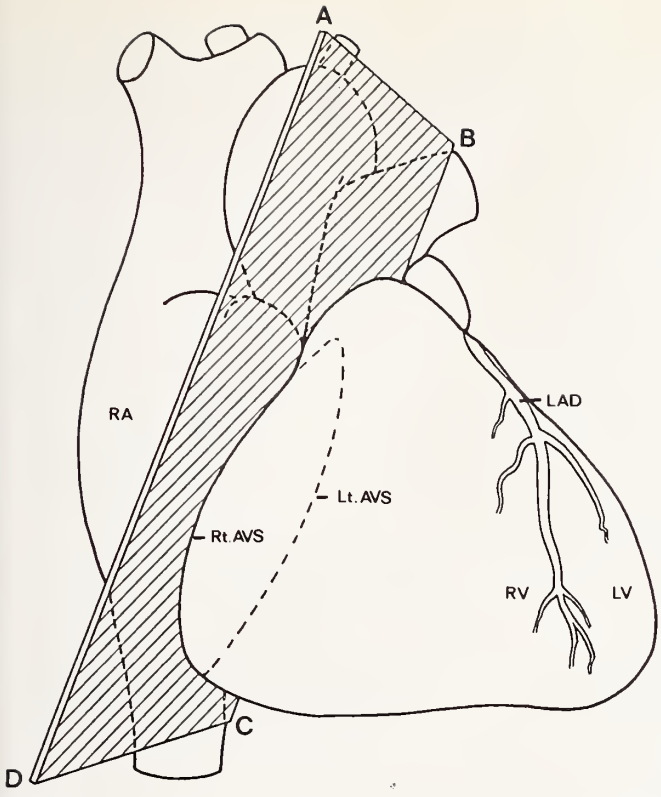


Figure 1—Mild right anterior oblique position projection showing plane ABCD coincident with the atrioventricular sulcus. Key: ABCD—plane; LAD—left anterior descending artery; Lt AVS—left atrioventricular sulcus; LV—left ventricle; Rt AVS—right atrioventricular sulcus; RA—right atrium; and RV—right ventricle.

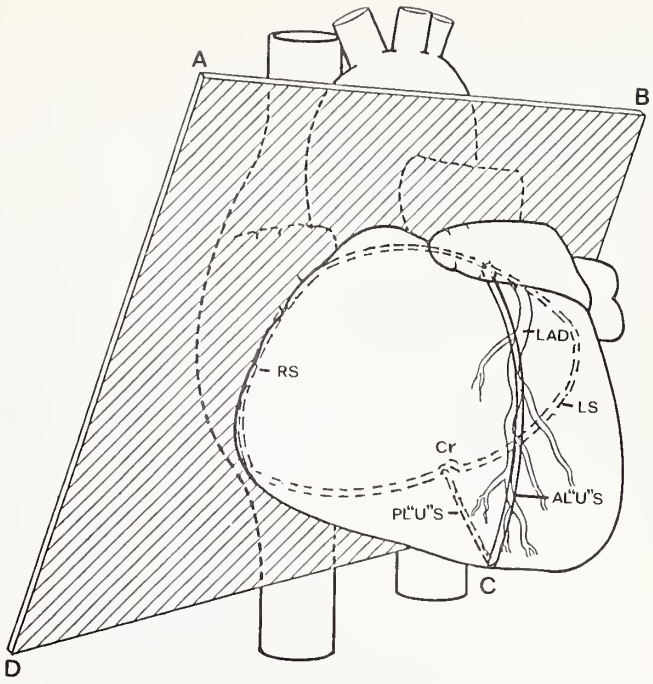


Figure 2—Composite schematic of the circle and the "U" segment of the atrioventricular sulcus and interventricular groove, respectively, in the posteroanterior position. Key: ABCD—plane; AL"U"S—anterior limb of "U" segment; Cr—crux; LAD—left anterior descending artery; LS—left semicircle; RS—right semicircle; and PL"U"S—posterior limb of "U" segment.

(Figure 3A). However, if the patient is rotated into a 45° left anterior oblique position (LAO), which moves the left shoulder closer to the imaging device than the right shoulder, the semicircles of the right and left AVS are separated fully and present as a relatively full circle with plane ABCD seen en face (Figure 3B). It should be noted that in the frontal or PA position (Figure 3C), plane ABCD is intermediate in orientation to that obtained with the patient in RAO and LAO positions (Figures 3A and 3B).

THE RIGHT CORONARY ARTERIAL ANATOMY AS RELATED TO THE RIGHT SEMICIRCLE

The right coronary artery (RCA) originates from the right anterior sinus of valsalva and follows the right semicircle, dividing into two major groups of surface arteries. One group extends from the right semicircle onto the right ventricular surface and the other group onto the right atrial surface. The ventricular arterial branches that emanate from the right semicircle in order of sequence are the conus, right ventricular, acute marginal, and right posterior ventricular arteries. For the purposes of simplicity, the right ventricular and acute marginal arteries all can be designated as right marginal arteries. The arterial branches emanating from the atrial side of the right circle in order of sequence, are the sinus node branch and the atrial artery or arteries.

LEFT CORONARY ARTERIAL ANATOMY AS RELATED TO THE LEFT SEMICIRCLE

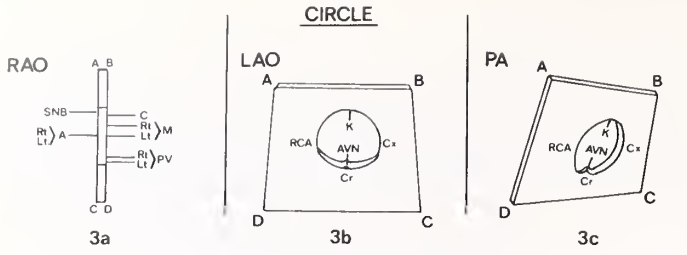
The left main coronary artery arises from the left sinus of valsalva and divides into left anterior descending (LAD) and circumflex (Cx) divisions. The Cx follows the Lt AVS or LS (Figure 1 and 2). The Cx also provides two major groups of arterial branches along the surface of the heart. The obtuse marginal and posterolateral arterial divisions are in the first group and extend over the left ventricular surface, and left atrial branches of the second group extend from the circumflex over the left atrial surface. Again, for the sake of simplicity, the obtuse marginal and posterolateral arteries can be combined and designated as left marginal arteries.

EFFECT OF PATIENT ROTATION ON PROJECTION OF VESSELS EMERGING FROM BOTH THE RIGHT AND LEFT AVS OR THE CIRCLE

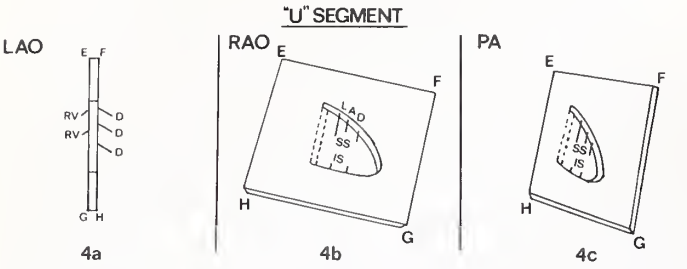
It will be evident from Figure 3A that in the RAO position (plane ABCD seen on end), a selective right or left coronary (RCA or LCA) injection of contrast will avoid superimposition of atrial and ventricular branches. Conversely, in the LAO position (plane ABCD seen en face) (Figure 3B), selective injection of the RCA or the LCA will superimpose atrial and ventricular arteries on the side of injection.

THE "U" SEGMENT

The second major landmark is the interventricular groove (IG) which has both an anterior and posterior component and defines a "U" shaped segment. The "U" segment is comprised of two limbs, an anterior limb which follows the anterior interventricular groove (AIG) and a posterior limb which follows the posterior interventricular groove (PIG) (Figure 5). Figure 5 is a schematic representation of the heart with the patient in a mild LAO position, that is with the patient's left side slightly closer to the imaging device than the right



Figures 3A, 3B, and 3C—Demonstrating projection of circle of atrioventricular sulcus within plane ABCD in the right anterior oblique, left anterior oblique, and posteroanterior positions, respectively. Key: A—atrial; AVN—atrioventricular nodal; C—conus; Cr—crux; Cx—circumflex; D—diagonal; IS—inferior septal; K—Kugel's; LAD—left anterior descending; M—marginal; PV—posterior ventricular; RCA—right coronary artery; Rt Lt—right and left; RV—right ventricular branch of LAD; and SS—superior septal.



Figures 4A, 4B, and 4C—Demonstrating "U" segment of interventricular groove within plane EFGH in the left anterior oblique, right anterior oblique, and posteroanterior positions, respectively. Key: A—atrial; AVN—atrioventricular nodal; C—conus; CR—crux; Cx—circumflex; D—diagonal; IS—inferior septal; K—Kugel's; LAD—left anterior descending; M—marginal; PV—posterior ventricular; RCA—right coronary artery; Rt Lt—right and left; RV—right ventricular branch of LAD; and SS—superior septal.

side. In this position, the cardiac apex is directed toward the observer. The plane EFGH is coincident with the IG, which separates the right and left ventricles and passes through the aortic root and the juxta-apical portion of the heart. In a direct PA position of the patient, the visualized surface of plane EFGH faces to the right, upward and frontally (Figure 4C). The circle of the AVS has been added to Figure 5 in order to demonstrate the junction of the AIG with the superior portion of the circle and the junction of the PIG with the inferior portion of the circle. In the LAO position, plane EFGH is projected on end, resulting in superimposition of both the anterior and posterior limbs of the "U" segment (Figure 4A) while the RAO position (Figure 4B) will "open up" the limbs of the "U" segment advantageously. The PA position (Figure 4C) shows projection of the "U" segment intermediate to that in Figure 4A and 4C. Figure 2 is a composite of the junction of the circle with the "U" segment in the PA or frontal plane. The junctional area of the posterior limb of the "U" segment (PL"U"S) with the inferior portion of the circle is referred to as the crux (Cr) of the heart and represents a point common to all four cardiac chambers.

SURFACE ARTERIES RELATED TO THE "U" SEGMENT

In addition to the circumflex artery, the left main coronary artery divides into the LAD, which courses along the anterior limb of the "U" segment (AL"U"S), while the posterior descending (PD) artery follows the

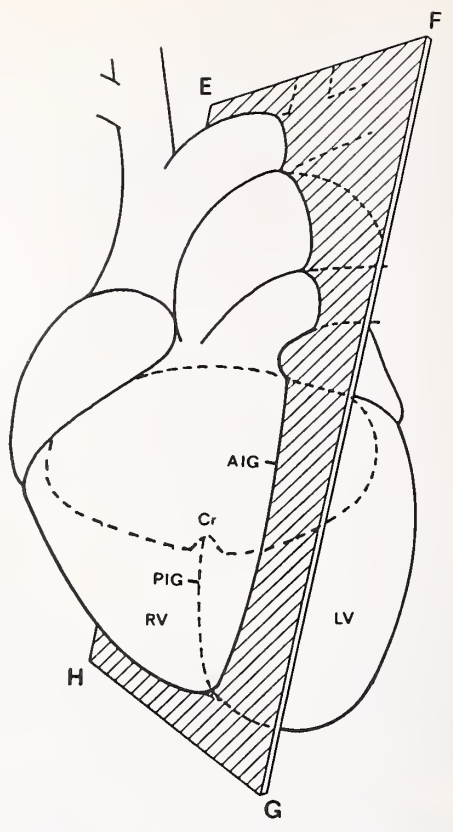


Figure 5—Mild left anterior oblique position showing plane EFGH coincident with the interventricular groove. Key: Cr—crux; LV—left ventricle; PIG—posterior interventricular groove; RV—right ventricle.

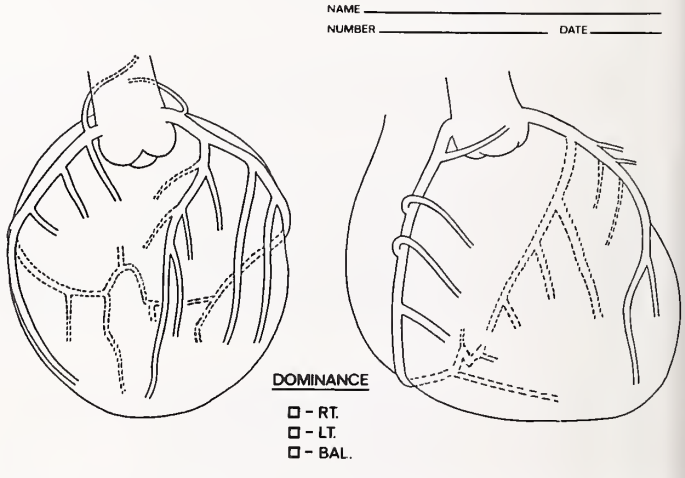


Figure 6—Schematics of coronary arterial circulation used by the x-ray department of the Newark Beth Israel Medical Center for graphic documentation of arterial pathology.

posterior limb of the "U" segment PL"U"S.The PD may arise either from the RCA or the LCA, but usually stems from the RCA.

The LAD yields a number of surface vessels over the right and left ventricles. The right-sided surface vessels are labeled right ventricular branches of the LAD (not to be confused with right ventricular branches of the RCA), and the left-sided vessels are designated as diagonal arteries. The surface vessels arising from either side of the PD and extending along the diaphragmatic surface of the heart are not labeled. specifically. The LAO projection produces superimposition of the "U" limbs within plane EFGH but separates its surface branches, while the RAO position will separate the "U" limbs and superimpose its surface branches (Figure 4A and 4B).

TABLE 1

Vessels Related to "Circle"

Surface Marker	Arteries	Veins
Rt Semicircle	RCA (Rt predominance if artery continues across crux and → PD)	Small cardiac (inferior half of rt semicircle; joins coronary sinus)
Atrial vessels "communicating" with rt semicircle	1. Sinus node branch 2. Rt atrial	Rt atrial
Ventricular vessels "communicating" with rt semicircle	1. Conus 2. Rt ventricular† 3. Acute marginal† 4. Rt posterior ventricular	Anterior cardiac*
Lt Semicircle	Cx (Lt predominance if Cx continues into crux and → PD)	Great cardiac (originates in anterior "U" limb and empties into coronary sinus)
Atrial vessels "communicating" with lt semicircle	Atrial circumflex	Oblique vein of left atrium
Ventricular vessels "communicating" with lt semicircle	1. Obtuse marginal† 2. Posterolateral†	1. Lt marginal 2. Posterior lt ventricular

*Anterior cardiac veins cross right semicircle and empty directly into right atrium. Coronary sinus is final pathway of all other surface veins.
†Ventricular vessels may be simply labelled right marginal arteries when emanating from the right semicircle and left marginal arteries when emanating from the left semicircle.

TABLE 2

Vessels Related to "U" Segment

Surface Marker	Arteries	Veins
Anterior "U" limb	LAD	Great cardiac (anterior interventricular)
Rt ventricular vessels "communicating" with anterior "U" limb	Rt ventricular branches of LAD	Rt ventricular tributaries of great cardiac vein
Lt ventricular vessels "communicating" with anterior "U" limb	Diagonals	Diagonal tributaries
Posterior "U" limb	PD which may arise from RCA or Cx	Middle cardiac (posterior interventricular)
Rt ventricular vessels "communicating" with posterior "U" limb	Not designated	Not designated
Lt ventricular vessels "communicating" with posterior "U" limb	Not designated	Not designated

PENETRATING ARTERIES OF THE "U" SEGMENT

Another major category of coronary arterial vessels penetrate the deep substance of the heart. The noteworthy penetrating vessels, which readily are opacified, include the superior and inferior septal perforator arteries (SS and IS), and a vessel segment in the crux with its AV nodal artery branch (AVN). The SS and IS septal arteries originate from the LAD and PD, respectively, penetrate the superior and inferior ventricular septum, and project within the cardiac silhouette approximately parallel to a line joining both ends of the "U" segment. This parallelism is not altered substantially by a change in position of the patient. Kugel's artery (K) (Figures 3B and 3C) originates variably from the surface of the heart at the junction of the anterior limb of the "U" segment and the superior aspect of the circle (any of the proximal major coronary arteries), penetrating the basal portion of the atrial septum. Although this vessel is seen rarely on normal coronary arteriography, it is mentioned here because of its important contribution as a potential collateral pathway in obstructive coronary artery disease. The

counterpart of Kugel's artery is the AVN branch artery, which is at the base of the ventricular septum and arises from the vessel that crosses the crux of the heart (Figures 3B and 3C). This vessel either may be the distal RCA or the distal CX. The AVN artery almost always is indentifiable on cine studies. The septal arteries are best separated in the RAO position (Figure 4B). On occasion, another penetrating vessel may be visible which originates from the posterior descending artery and supplies the posteromedial papillary muscle of the left ventricle. Visualization of other penetrating vessels is infrequent.

CORONARY ARTERY DOMINANCE

The coronary circulation may be right or left predominant or balanced.[2] Briefly, in a right predominant system the RCA follows the right semicircle, gives rise to the PD, crosses the crux, and supplies one or more branches of the posterior surface of the left ventricle. In a left predominant system, the Cx follows the left semicircle, is the source of the PD, and crosses the crux. Posterior left ventricular divisions then will emanate from the Cx along the diaphragmatic surface of the left ventricle. In a balanced circulation, both RCA and Cx reach the crux.

ADDITIONAL CLUES TO VESSEL IDENTIFICATION ON CINE CORONARY ARTERIOGRAPHY

Additional clues to vessel identification include the following:

1. Surface vessels show greater displacement than penetrating vessels with rotation of the patient.
2. Surface vessels undulate while penetrating vessels are relatively straight.
3. Arteries that "cross" each other are on opposing surfaces of the heart.
4. Branches that move synchronously frequently stem from the same parent artery.
5. A curvilinear radiolucency of the epicardial fat in the left AVS is an excellent marker for the left semicircle.
6. The coronary sinus which represents a major pathway of cardiac venous return is opacified very readily and is located in the lower left semicircle thereby facilitating identification of the anticipated course of the Cx.
7. Despite the many variations in the anatomy of the coronary arteries, an important concept is that of reciprocal coronary artery supply in patients with a normal myocardium. For example, if the RCA courses along the right semicircle and well onto the left semicircle, then the Cx usually will demonstrate an abbreviated course in the left semicircle. Again, if the LAD courses for a short distance along the anterior limb of the "U" segment, the PD whether arising from the RCA or Cx can be expected to reciprocate by extending around the apex of the heart toward the anterior limb of the "U" segment. If this primary type of reciprocity does not occur, then arterial branches of one major coronary artery may extend for greater distances than usual in order to fill a "void" left by divisions of another major coronary artery.

In evaluating the coronary arterial circulation it always is important to be cognizant of congenital variations of coronary anatomy. In general, a coronary vessel may vary in site of origin, number of vessels, and site of distribution.

COMPLEX ANGLING CINE CORONARY ARTERIOGRAPHY

The arterial identification process described is predicated on images obtained from an x-ray source which is directed perpendicular to the long axis of the patient's body. With current state of the art in radiographic equipment, the x-ray beam also can be directed in a craniocaudad or caudocranial axis, in conjunction with the orthogonal patient positions described. This usually will permit optimum visualization of a segment of the coronary circulation that previously was foreshortened or obscured.[3,4] After appreciating the basic changing projections of the circle and the "U" segment resulting from relative or absolute rotation of the patient, the additional effect of cephalocaudad angulation on projection of the circle and the loop can be anticipated. In turn, the projection of the vessels following the cardiac markers more readily become predictable. Tables 1 and 2 are a summary of the coronary anatomy approach described. The major coronary venous circulation also has been added for completeness.

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Angina comes in many forms...

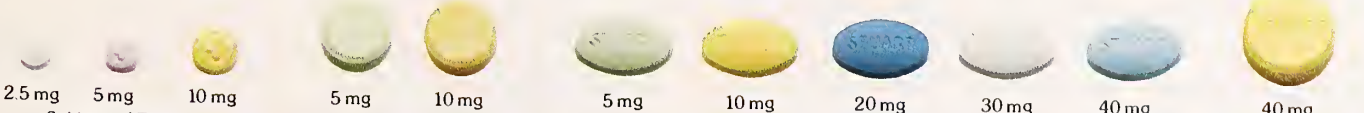


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INDICATIONS AND USAGE: SORBITRATE (isosorbide dinitrate) is indicated for the treatment and prevention of angina pectoris. All dosage forms of isosorbide dinitrate may be used prophylactically to decrease frequency and severity of anginal attacks and can be expected to decrease the need for sublingual nitroglycerin.

The sublingual and chewable forms of the drug are indicated for acute prophylaxis of angina pectoris when taken a few minutes before situations likely to provoke anginal attacks. Because of a slower onset of effect, the oral forms of isosorbide dinitrate are not indicated for acute prophylaxis.

CONTRAINDICATIONS: SORBITRATE is contraindicated in patients who have shown purported hypersensitivity or idiosyncrasy to it or other nitrates or nitrites. Epinephrine and related compounds are ineffective in reversing the severe hypotensive events associated with overdose and are contraindicated in this situation.

WARNINGS: The benefits of SORBITRATE during the early days of an acute myocardial infarction have not been established. If one elects to use organic nitrates in early infarction, hemodynamic monitoring and frequent clinical assessment should be used because of the potential deleterious effects of hypotension.

PRECAUTIONS: General: Severe hypotensive response, particularly with upright posture, may occur with even small doses of SORBITRATE. The drug should therefore be used with caution in subjects who may have blood volume depletion from diuretic therapy or in subjects who have low systolic blood pressure (eg, below 90 mmHg). Paradoxical bradycardia and increased angina pectoris may accompany nitrate-induced hypotension. Nitrate therapy may aggravate the angina caused by hypertrophic cardiomyopathy.

Marked symptomatic, orthostatic hypotension has been reported when calcium channel blockers and organic nitrates were used in combination. Dose adjustment of either class of agents may be necessary.

Tolerance to this drug and cross-tolerance to other nitrates and nitrites may occur. Tolerance to the vascular and antianginal effects of isosorbide dinitrate or nitroglycerin has been demonstrated in clinical trials, experience through occupational exposure, and in isolated tissue experiments in the laboratory. The importance of tolerance to the appropriate use of isosorbide dinitrate in the management of patients with angina pectoris has not been determined. However, one clinical trial using treadmill exercise tolerance (as an end point) found an 8-hour duration of action of oral isosorbide dinitrate following the first dose (after a 2-week placebo washout) and only a 2-hour duration of effect of the same dose after 1 week of repetitive dosing at conventional dosing intervals. On the other hand, several trials have been able to differentiate isosorbide dinitrate from placebo after 4 weeks of therapy and, in open trials, an effect seems detectable for as long as several months.

Tolerance clearly occurs in industrial workers continuously exposed to nitroglycerin. Moreover, physical dependence also occurs since chest pain, acute myocardial infarction, and even sudden death have occurred during temporary withdrawal of nitroglycerin from the workers. In clinical trials in angina patients, there are reports of anginal attacks being more easily provoked and of rebound in the hemodynamic effects soon after nitrate withdrawal. The relative importance of these observations to the routine, clinical use of isosorbide dinitrate is not known. However, it seems prudent to gradually withdraw patients from isosorbide dinitrate when the therapy is being terminated, rather than stopping the drug abruptly.

Information for Patients: Headache may occur during initial therapy with SORBITRATE. Headache is usually relieved by the use of standard headache remedies or by lowering the dose and tends to disappear after the first week or two of use.

Drug Interactions: Alcohol may enhance any marked sensitivity to the hypotensive effect of nitrates.

Isosorbide dinitrate acts directly on vascular smooth muscle; therefore, any other agent that depends on vascular smooth muscle as the final common path can be expected to have decreased or increased effect depending on the agent.

Carcinogenesis, Mutagenesis, Impairment of Fertility: No long-term studies in animals have been performed to evaluate the carcinogenic potential of this drug. A modified two-litter reproduction study in rats fed isosorbide dinitrate at 25 or 100 mg/kg/day did not reveal any effects on fertility or gestation or any remarkable gross pathology in any parent or offspring fed isosorbide dinitrate as compared with rats fed a basal-controlled diet.

Pregnancy Category C: Isosorbide dinitrate has been shown to cause a dose-related increase in embryotoxicity (increase in mummified pups) in rabbits at oral doses 35 and 150 times the maximum recommended human daily dose. There are no adequate and well-controlled studies in pregnant women. SORBITRATE should be used during pregnancy only if the potential benefit justifies the potential risk to the fetus.

Nursing Mothers: It is not known whether this drug is excreted in human milk. Because many drugs are excreted in human milk, caution should be exercised when SORBITRATE is administered to a nursing woman.

Pediatric Use: The safety and effectiveness of SORBITRATE in children has not been established.

ADVERSE REACTIONS: Adverse reactions, particularly headache and hypotension, are dose-related. In clinical trials at various doses, the following have been observed.

Headache is the most common (reported incidence varies widely, apparently being dose-related, with an average occurrence of about 25%) adverse reaction and may be severe and persistent. Cutaneous vasodilation with flushing may occur. Transient episodes of dizziness and weakness, as well as other signs of cerebral ischemia associated with postural hypotension, may occasionally develop (the incidence of reported symptomatic hypotension ranges from 2% to 36%). An occasional individual will exhibit marked sensitivity to the hypotensive effects of nitrates and severe responses (nausea, vomiting, weakness, restlessness, pallor, perspiration, and collapse) may occur even with the usual therapeutic dose. Drug rash and/or exfoliative dermatitis may occasionally occur. Nausea and vomiting appear to be uncommon. Case reports of clinically significant methemoglobinemia are rare at conventional doses of organic nitrates. The formation of methemoglobin is dose-related and, in the case of genetic abnormalities of hemoglobin that favor methemoglobin formation, even conventional doses of organic nitrate could produce harmful concentrations of methemoglobin.

DOSAGE AND ADMINISTRATION: For the treatment of angina pectoris, the usual starting dose for sublingual SORBITRATE is 2.5 to 5 mg, for chewable tablets, 5 mg, for oral (swallowed) tablets, 5 to 20 mg; and for controlled-release forms, 40 mg.

SORBITRATE should be titrated upward until angina is relieved or side effects limit the dose. In ambulatory patients, the magnitude of the incremental dose increase should be guided by measurements of standing blood pressure.

The initial dosage of sublingual or chewable SORBITRATE for prophylactic therapy in angina pectoris patients is generally 5 or 10 mg every 2 to 3 hours. Adequate controlled clinical studies demonstrating the effectiveness of chronic maintenance therapy with these dosage forms have not been reported.

SORBITRATE in oral doses of 10 to 40 mg given every 6 hours or in oral controlled-release doses of 40 to 80 mg given every 8 to 12 hours is generally recommended. The extent to which development of tolerance should modify the dosage program has not been defined. *The oral controlled-release forms of isosorbide dinitrate should not be chewed.*

DOSAGE FORMS AVAILABLE: Sublingual Tablets (2.5, 5, 10 mg); Chewable Tablets (5, 10 mg); Oral Tablets (5, 10, 20, 30, 40 mg); Sustained Action Tablets (40 mg).

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Tumor Lysis Syndrome in a Patient with American Burkitt's Lymphoma

Arthur A. Topilow, M.D., Leslie L. Hershkowitz, M.D., Martin S. Krumerman, M.D., Neptune*

A 36-year-old white male with an unresectable abdominal mass was recognized to have Burkitt's lymphoma. The patient developed the metabolic abnormalities of the tumor lysis syndrome. Physicians should be aware of the staging and history of Burkitt's lymphoma and look for the tumor lysis syndrome.

American Burkitt's lymphoma is an uncommon neoplasm which has, as a major characteristic, an extremely rapid growth. Tumor necrosis occurs during the rapid growth phase and after chemotherapy. Rapid lysis occurring during and after chemotherapy may release intracellular materials and create metabolic derangements which have been called the "tumor lysis syndrome." This syndrome consists of hyperuricemia, hyperphosphatemia, and hyperkalemia.[1] The flooding of these metabolic products into the circulation, during the 24- to 48-hour period after chemotherapy, may lead to renal failure and life-threatening arrhythmias.

Our report describes a patient who developed metabolic abnormalities during the course of treatment for American Burkitt's lymphoma, which we have interpreted to be an expression of the tumor lysis syndrome.

CASE REPORT

A 36-year-old white male police officer, was admitted to Jersey Shore Medical Center on June 21, 1982, because of unrelenting abdominal pain of four-months' duration, associated with night sweats, anorexia, malaise, and a 30-pound weight loss. During a hospitalization for these complaints four weeks earlier, endoscopy and upper gastrointestinal x-ray series failed to reveal the nature of his problem. He was rehospitalized because his symptoms persisted.

The patient's past medical history included surgery for an appendiceal abscess ten years prior to the present admission. He had nonspecific gastrointestinal complaints for many years.

Physical examination revealed an afebrile young male who appeared extremely distressed as a result of abdominal pain. His pulse was 100 per minute and regular; respiratory rate was 30 per minute; blood pressure was 140/90. The skin was moist and pale. There was no adenopathy. A large tender right lower quadrant abdominal mass was noted. Bowel sounds were hyperactive.

Laboratory studies showed: a normal hemogram; phosphorus, 2.9 mg/dl; uric acid, 6.3 mg/dl; potassium, 3.7 meq per liter, and LDH, over 600 units. A chest x-ray was normal. An intravenous pyelogram showed a soft tissue density obscuring the right psoas shadow and deviation of the right ureter (Figure 1). Computerized tomography revealed a mass extending from the liver to the upper pelvis in the right side of the abdomen (Figure 2).

*From the Jersey Shore Medical Center, Neptune, where Dr. Topilow is the Director, Section of Hematology-Oncology; Dr. Hershkowitz is a Medical Resident, Department of Medicine; and Dr. Krumerman is the Director, Department of Pathology. Correspondence may be addressed to Dr. Topilow, Director, Section of Hematology-Oncology, Jersey Shore Medical Center, 1945 Corlies Avenue, Neptune, NJ 07753.



Figure 1—Preoperative intravenous pyelogram shows a dilated right calyceal system and medial displacement of the right ureter (arrow). The left kidney and ureter are normal.



Figure 2—Computerized tomography of the abdomen reveals a large solid mass on the right, at a level inferior to the liver (arrow).

An exploratory laparotomy on the third hospital day revealed a huge intra-abdominal mass which was biopsied. Resection was undertaken due to the enormous size of this mass. A frozen section suggested lymphoma, but histologic study subsequently demonstrated a "monotonous sea" of small lymphocytes with scattered histiocytes which created a starry sky appearance consistent with Burkitt's lymphoma (Figure 3). A medium power view of this material showed small undifferentiated lymphocytes mixed with phagocytic macrophages (histiocytes) which had ingested nuclear debris (Figure 4). A touch preparation of omental tissue using Wright-Giemsa stain displayed markedly basophilic cytoplasm with characteristic vacuolization, typical of Burkitt's lymphoma (Figure 5). Histochemical staining with methyl green pyronine was positive for cytoplasmic RNA. A PAS stain (periodic acid Schiff) for glycogen was negative. These properties were consistent with Burkitt's phenotype. Chromosome studies for the Burkitt's genotype were not

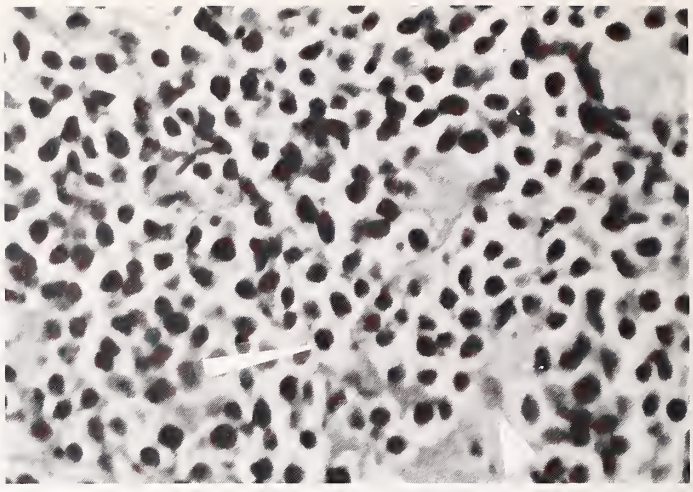


Figure 3—The "starry sky" appearance consisting of scattered histiocytes in a monotonous background of small undifferentiated lymphocytes is seen. The thin arrow points to a lymphocyte, and the broad arrow points to a histiocyte.

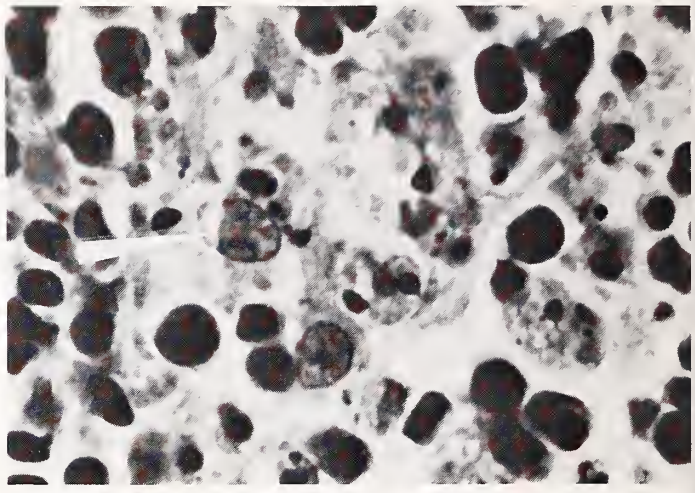


Figure 4—Multiple phagocytic macrophages (histiocytes) are seen ingesting nuclear debris.

performed. A diagnosis of stage C Burkitt's lymphoma was made (NIH classification).

On the first postoperative day, the uric acid rose to 13 mg/dl, and the serum potassium to 5.1 meq/l, but these values fell to normal after intravenous fluid and allopurinol were administered (Table 1). Dyspnea and lethargy were noted. A pleural effusion was aspirated and examined, and was consistent with Burkitt's lymphoma. Chemotherapy, which was delayed until July 5, 1982, 12 days after surgery because of multiple clinical and metabolic problems, consisted of intravenous cyclophosphamide and vincristine and oral procarbazine. The day after the initiation of chemotherapy, the uric acid level went to 6.9 mg/dl; and the serum potassium showed an upward trend (Figures 6 and 7). In anticipation of the tumor lysis syndrome, a treatment program consisting of intravenous fluid, alkalinization of the urine, increased allopurinol dosage, and aluminum-based, phosphate binding antacids was instituted. The uric acid and phosphorus levels declined (Figure 6). One week later, on July 12, chemotherapy was reinstituted and these metabolites rose again (Figure 6). Significant hypocalcemia (7.8 mg/dl), which was seen 3 days after the second chemotherapeutic treatment, was unusual in view of the normal phosphate level at that time; this also was consistent with the tumor lysis syndrome.[1]

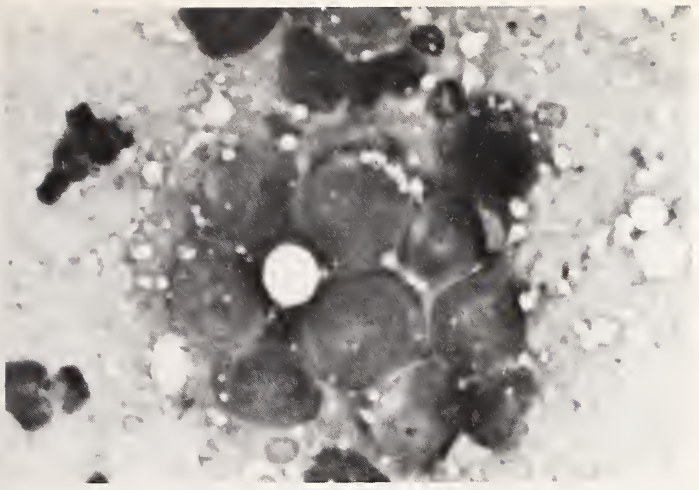


Figure 5—A touch preparation of omental tissue stained with Wright-Giemsa shows the characteristic cytoplasmic vacuolization. The cytoplasm markedly is basophilic in the original preparation.

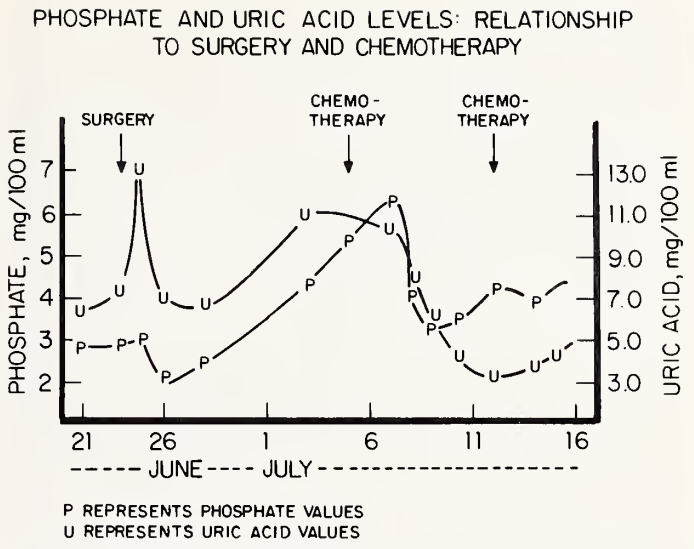


Figure 6—Phosphate and uric acid levels: relationship to surgery and chemotherapy.

All of these elevations occurred in the presence of good urine output and a normal BUN and creatinine, suggesting that the elevated values were derived from products of tumor destruction, rather than incomplete excretion of metabolites.

The initial chemotherapy was administered when the patient was nearly moribund, however his condition improved dramatically. This clinical improvement coincided with our laboratory values which suggested rapid tumor lysis. The patient was discharged ten days following the institution of chemotherapy. Vigorous outpatient and inpatient chemotherapy with cyclophosphamide, vincristine, adriamycin, bleomycin, prednisone, and methotrexate was continued. A brief period of control was enjoyed by the patient, but he failed to maintain his response and expired four months later on November 3, 1982, as a result of progressive abdominal tumor growth and secondary gastric obstruction. His survival from the time of diagnosis was 4.2 months.

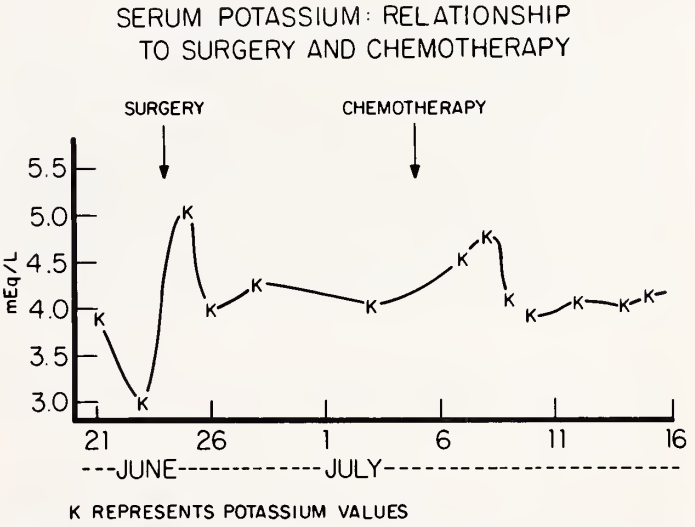


Figure 7—Serum potassium: relationship to surgery and chemotherapy.

DISCUSSION

The histology of this patient's tumor is consistent with Burkitt's lymphoma. The staging system as first described by McGrath,[2] modified by Ziegler,[3] and in current use at the National Institutes of Health (NIH) was used in our case description and is shown in Table 1. Of interest is a recent report by Levine describing his experience with the American Burkitt's lymphoma registry (ABLR).[4] His staging system, which is somewhat different, still is used by the ABLR (Table 2). Of 256 registry cases, only 13 were males over the age of 31. According to Ziegler, two important prognostic determinants are age and stage.[3] Younger patients (less than 12 years of age) fare significantly better. The projected survival of stage A, B, and AR is 82 percent at 2 years, but this changes to a 41 percent projected survival of stage C and D.

Our patient presented as stage C (NIH) and, postoperatively, rapidly became stage D (NIH) because of the development of pleural effusion. His overall survival was 4.2 months. As described by Levine, the median survival for stage C (NIH) is 7.0 months, and for stage D (NIH) is 6.0 months.[4] Median survival in stage III (ABLR) is 6.0 months, and in stage IV (ABLR) is 6.6 months. The two-year survival rate in stage C (NIH) is 33 percent, and in stage D (NIH) is 25 percent.

It has been suggested that the chemotherapy be started as soon as possible following the diagnosis of Burkitt's lymphoma[1] and that the treatment not be postponed for surgical healing. We appreciated this but were unable to begin immediately due to the preparation time for the permanent histologic sections in a hitherto undiagnosed case and because of other clinical considerations.

We believe that this patient demonstrated the tumor lysis syndrome, which was well described by Cadman[5] in 1977 and Cohen in 1980.[1] The syndrome, which is characterized by the triad of hyperuricemia, hyperphosphatemia, and hyperkalemia is seen after chemotherapy of rapidly proliferating neoplasms, particularly Burkitt's lymphoma and acute leukemia. The degree of expression of this syndrome appears to be related to the initial tumor burden and the extreme sensitivity of the tumor to chemotherapy. Cohen suggests that the phosphate elevation is a function of tumor lysis and phosphate release, rather than renal failure, and that the serum LDH has a significant association with hyperphosphatemia, and therefore may be a predictor of the tumor lysis syndrome.[1] The eleva-

TABLE 1

*Clinical Staging Burkitt's Lymphoma**

Stage A:	Localized extra-abdominal masses
Stage B:	Two or more extra-abdominal masses
Stage C:	Intra-abdominal tumor with or without facial bone involvement
State D:	Intra-abdominal tumor with multiple extra-abdominal sites
Stage AR:	Stage C patients with greater than 90 percent resection of intra-abdominal tumor mass

*McGrath, Ziegler, National Institutes of Health (NIH).

TABLE 2

American Burkitt's Lymphoma Registry (ABLR)

Stage I:	Single tumor mass	
	extra-abdominal	1A
	abdominal	1B
Stage II:	Two separate masses either above or below the diaphragm	
Stage III:	More than two separate tumor masses or disease above and below the diaphragm	
Stage IV:	Pleural effusion, ascites, central nervous system involvement (maligant cells in the cerebrospinal fluid) or bone marrow	

tion of serum potassium is the most dangerous and potentially life-threatening event, and requires careful monitoring.[6]

Consequences of hyperphosphatemia secondary to tumor lysis include precipitation of calcium phosphate salts and hypocalcemia.[7] Deposition of these salts coupled with hyperuricemia and urate nephropathy may be responsible for the high incidence of renal failure seen in these patients. Release of intracellular potassium in the face of renal insufficiency can result in sudden death.[6] The normal kidney, as seen in our patient, will easily excrete an abnormal potassium load; however, in the face of renal insufficiency, hyperkalemia can lead to life-threatening arrhythmias.

Optimal treatment includes alkalinization of urine, allopurinol, aluminum-based phosphate binding antacids, and adequate hydration. The approach to metabolic management of Burkitt's lymphoma, as described by Cohen et al.,[1] is a good one (Table 3). If preexistent hyperuricemia is seen, chemotherapy should be delayed, if possible, until a correction is obtained. Dialysis may have to be instituted in cases of early renal failure. Anticipation and treatment of the tumor lysis syndrome in patients with high grade lymphomas and acute leukemia may lead to increased survival during chemotherapy treatment.

TABLE 3

*Approach to Metabolic Management of Burkitt's Lymphoma**

1. Presenting without metabolic aberration
   a. Allopurinol, 500 mg/m2 BSA*/day; reduce to 200 mg/m2 BSA/day 3 days into chemotherapy
   b. Hydration: 3,000 ml/m2 BSA/day
   c. Chemotherapy: initiate within 24 to 48 hours of admission
   d. Monitor electrolytes, blood urea nitrogen, creatinine, uric acid, calcium, phosphorus, LDH
      1. Stage A, B, AR—monitor daily
      2. Stage C, D—monitor every 12 hours

2. Presenting with metabolic aberration
   a. Allopurinol as above; reduce dose when hyperuricemia is controlled
   b. Hydration as above; add diuretics as necessary
   c. Alkalinization: keep urine pH 7.0 or over
      1. Sodium bicarbonate, 50 meq/l intravenous solution initially; titrate as required
      2. Discontinue when uric acid is normal
   d. Chemotherapy: postpone until uric acid is controlled or dialysis is begun
   e. Monitor same studies every 6 to 12 hours until stable (at least 4 to 5 days)

3. Patients unresponsive to above measures: treat with hemodialysis acording to the following criteria
   a. Serum potassium 6 meq/l or greater
   b. Serum uric acid 6 mg/dl or greater
   c. Serum creatinine 10 mg/dl or greater
   d. Serum phophorus 10 mg/dl or rapidly rising
   e. To reduce volume overload
   f. Symptomatic hypocalcemia

*BSA = body surface area

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Opinion: Threshold Attainment—A New Medical Specialty

Robert A. Goldstone, M.D., Paterson*

Automobile insurance costs will not be contained by raising the medical threshold. Physicians who treat injured plaintiffs referred by attorneys already have established treatment patterns above the proposed dollar levels.

Rapid changes in our complex society have led to equally rapid changes in the health care delivery system. One of the changes is the development of new specialties. For example, who heard of the sports medicine physician a decade ago, before the physical fitness craze hit the nation? Less visible specialists have emerged during the same period in response to different contemporary situations. This essay will identify and describe one newly emerging specialty of medical practice.

The peculiarities of the New Jersey no-fault law are such that an injured party cannot bring suit for damages until a "threshold" level of medical expenses is reached. In an attempt to unclog the courts and to control insurance premiums, it recently has been proposed that the dollar amount of this threshold be raised. This has given rise to a new category of physicians who, working with attorneys who refer cases to them for treatment, have brought about the creation of a new specialty: Threshold Attainment. The diagnoses, prognoses, and treatments offered by the Threshold Attainer bear a superficial resemblance to those which the reader of this publication might feel to be appropriate, but sufficient differences exist to permit distinctions to be drawn. Since the effectiveness of their work is greatest if the nature of the specialty is hidden, these practitioners previously have not been given the recognition they deserve. This report will make it easier to recognize them and their patients.

The practice of medicine demands that there be patients. Therefore, it seems proper to begin by identifying the pool of individuals who select a Threshold Attainer to be their treating physician. Typically, following a motor vehicle accident, these patients will refuse immediate medical care or assistance, and occasionally will go so far as to make a statement to the police that they have not been injured. They do not seek the advice of the family physician who knows the medical history and faithfully has treated their injuries and illnesses in previous years. Nor do they make an effort to contact the orthopedist, neurologist, or neurosurgeon who might have treated them successfully for prior injuries. Instead, the first contact is with an attorney, who either has successfully handled a prior claim for them, or to whom they have been referred by "a friend." At that time, it is suggested that a specific doctor be selected for treatment. That doctor, of course, is a certified specialist in Threshold Attainment.

A smaller subset of these patients do go to an emergency room. A percentage of them sign out before being examined, but the remainder go through the normal procedures and rarely are found to have been injured

*Dr. Goldstone is an orthopaedic surgeon. Correspondence may be addressed to Dr. Goldstone, 100 Hospital Plaza, Suite 210, Paterson, NJ 07503.

severely enough to warrant hospitalization. They are evaluated as emergency room outpatients, and are discharged with advice to seek followup care from their family physician or an appropriate specialist. Instead, they proceed as above, and are guided by an attorney, away from their own doctor or the recommended specialist, and to the selected Threshold Attainer. Not infrequently, a hospitalization of 5 or 12 days follows.

When interviewed before a trial, the patient displays severe amnesia when asked how he came to be treated by the attainment doctor. The most common response (after a long pause) is that he was referred by a friend. When pressed for the name of the friend, the amnesia worsens, although occasionally a first name is offered. If asked why he allowed someone whose name he did not even know, to select a physician for him, without first attempting to seek the advice of his own physician, the amnesia disappears and catatonia sets in.

Another group of patients originally follow the instructions of the emergency room physician and/or consult their personal physician. They receive a short period of treatment, and soon are discharged with office notes indicating that the symptoms were responding satisfactorily, and that the patient recovered completely. Some months later, after consultation with a lawyer, treatment is resumed under the supervision of an attainment specialist.

These specialists, at first glance, might appear to be traditional practitioners of medicine, but there are distinguishing characteristics by which they can be identified. Among the more subtle of these is the fact that they do not receive referrals from physicians, except from others who practice their black art, in which case, a constant cross-referral pattern is noted.

Although the Thresholder is not certified by any of the recognized accrediting boards, his first bill usually indicates that he performed a "complete" neurologic, orthopedic, and psychologic examination. Therapy with a variety of modalities follows.

No expense is spared offering the patient the latest and most expensive diagnostic studies. Most patients are referred for CAT scan and EEG if they have any hint of pain above the supraclavicular fossa. Thermography is performed within a few weeks of injury, to obtain a "picture of the pain," and regardless of the result, EMG and nerve conduction studies follow. No effort is made to obtain the x-rays taken in the hospital's emergency room for review, but instead the patient is subjected to additional radiation exposure for new studies of the same areas, sometimes on the same day as the hospital examination. Freed from the technical restraints placed on the hospital's radiology department by various quality control committees, the Attainer's films often are uncollimated, poorly exposed, and occasionally not even labeled to show the date, the patient's name, or the file number. Taken on a low-powered machine, necessitating a longer exposure, patient movement may have blurred the film, and contrast is likely to be poor. Frequently processed by hand, they often are stained and fogged. Nevertheless, these technically inadequate x-rays are interpreted as "revealing" acute abnormalities not seen by the hospital's board certified radiologists (who might, however, have noted a normal accessory bone or pre-existing chronic degenerative disease). Among the diagnoses frequently "missed" by the radiologist are: chip fracture, subluxation, spasm, acute disc rupture, restricted motion, and pinched nerve.

Initial treatment usually is rendered three times a week and then gradually is tapered. Psychotherapy for acute anxiety neurosis often is offered to these patients, and I have seen infants of six months referred for psychiatric counseling following motor vehicle accidents. It is customary for individuals who are injured together to be treated together, to receive the same tests, treatments, and examinations, on the same dates, and for them all to be discharged from care on the same date. Patients who have been under the care of an attainment doctor for back pain frequently express surprise on being asked to disrobe for a pretrial examination, stating that in all their months of examination and treatment they never had been asked to remove their clothes before. Patients with lumbar radiculitis note that they never have seen a reflex hammer!

An interesting pattern of referrals occurs within some provider organizations, where a half-hearted effort is carried out to make it appear as if a single functioning attainment mill actually is several separate business entities. The treating physician refers the patient to the ABC Pain Diagnostic Center for thermography, to the CDE Radiology Associates for routine and special studies, to the EFG Electrodiagnostic Center for EEG, EMG, and nerve conduction tests, and finally to the XYZ Rehabilitation Group for therapy.

Activities of a Threshold Attainer pass unnoticed in the community.

The reports and bills from the physician and from each of these groups arrive on letterheads which use identical type styles, and all the addresses are the same, except, perhaps, for the one that utilizes a post office box number on its stationery and billhead. I have always thought that it would be difficult to carry out an EEG examination within the confines of one of those boxes, given the size of the machinery, but that probably is a prejudice on my part.

The rule of thumb appears to be that treatment is rendered until the threshold is exceeded by 25 percent, thereby allowing a safe margin. When the New Jersey legislature started talking about raising the threshold, there was an observable jump in the extent and duration of treatment. The threshold industry was gearing up for the new levels, so that well before any decision was reached, patients were being exposed to sufficient treatment to enable them to surpass the highest of any of the dollar amounts being discussed in Trenton.

Diagnostic acumen is one of the hallmarks of this unique area of expertise. While ordinary people suffer from headaches, these patients suffer from "cephalgia." What I would call a bruise, is recognized by the Thresholder as "severe traumatic myositis and myalgia." Simple back sprain or strain does not exist in this world of hyperbole. Instead, the patients are claimed to suffer from "lumbar radiculitis," even if they

never have experienced radiating pain, or shown any evidence of reflex, sensory, or motor abnormality. The forms submitted to the insurance carrier and the answers provided for the interrogatories, often list the finding of " loss of lumbar lordosis" as a diagnosis with an insinuation that dire consequences are to be expected.

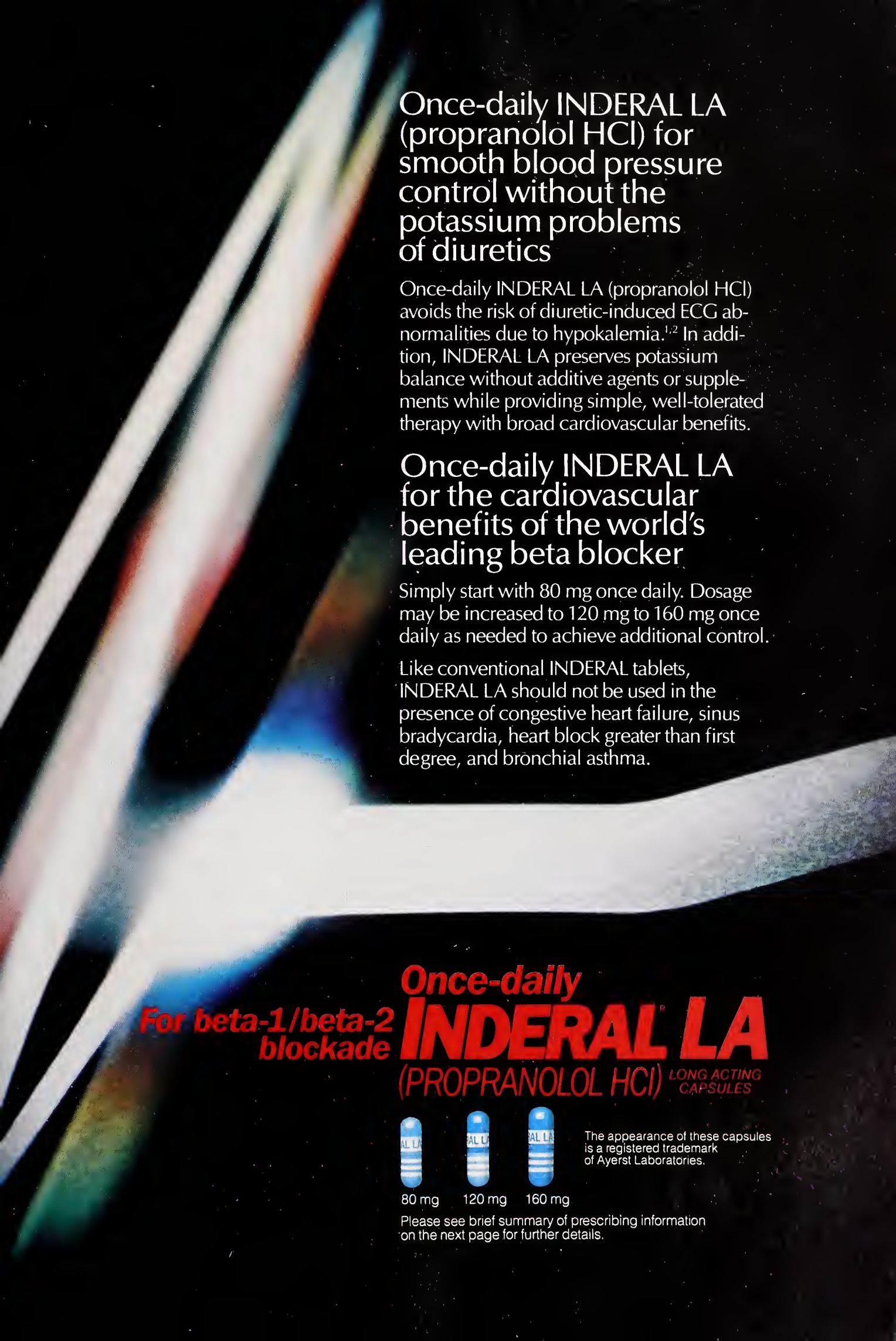
In order to be true to his calling, the threshold specialist's duty extends beyond mere fiscal attainment and diagnostic exaggeration, to include utilization of his special prognosticating skills. He differs from the recognized traumatologist in that he is able to certify permanency in all cases. In his opinion, no soft tissue injury is capable of healing without residuals, and all have the probability of a lifetime of recurrent attacks of pain as well as the development of arthritis (even if there has been no joint involvement).

Since most of the attainment specialists have no need to be on the staff of a hospital and find no advantage to membership in a county medical society, their activities in the community pass unnoticed by the majority of traditional practitioners, whose distaste for the hypocrisy of the courtroom leads them to isolate themselves from the legal system. If closely questioned by his peers, the attainment specialist finds it more profitable to forsake hospital staff membership, or give up medical society affiliation, thereby removing himself from any form of peer review.

There is one diagnostic sign which clearly identifies the Threshold Attainer, but, unfortunately, it is one we often do not have the opportunity to observe. When the attorney who refers cases to him is himself injured or ill, or when an emergency befalls a member of the lawyer's family, he does not seek treatment or advice from the practitioners to whom he sends his clients! Instead, he seeks care from the physicians whose judgment he has scorned, and whose opinions he has belittled in court. What more telling indictment could there be of both parties?

Right from the start in hypertension...





Once-daily INDERAL LA (propranolol HCl) for smooth blood pressure control without the potassium problems of diuretics

Once-daily INDERAL LA (propranolol HCl) avoids the risk of diuretic-induced ECG abnormalities due to hypokalemia.[1,2] In addition, INDERAL LA preserves potassium balance without additive agents or supplements while providing simple, well-tolerated therapy with broad cardiovascular benefits.

Once-daily INDERAL LA for the cardiovascular benefits of the world's leading beta blocker

Simply start with 80 mg once daily. Dosage may be increased to 120 mg to 160 mg once daily as needed to achieve additional control.

Like conventional INDERAL tablets, INDERAL LA should not be used in the presence of congestive heart failure, sinus bradycardia, heart block greater than first degree, and bronchial asthma.

For beta-1/beta-2 blockade

Once-daily

INDERAL® LA

(PROPRANOLOL HCl) LONG ACTING CAPSULES

80 mg 120 mg 160 mg

The appearance of these capsules is a registered trademark of Ayerst Laboratories.

Please see brief summary of prescribing information on the next page for further details.

Once-daily For beta-1/beta-2 blockade INDERAL® LA (PROPRANOLOL HCl) LONG ACTING CAPSULES



The appearance of these capsules is a registered trademark of Ayerst Laboratories.

BRIEF SUMMARY *(FOR FULL PRESCRIBING INFORMATION, SEE PACKAGE CIRCULAR.)*

INDERAL® LA brand of propranolol hydrochloride **(Long Acting Capsules)**

DESCRIPTION. Inderal LA is formulated to provide a sustained release of propranolol hydrochloride. Inderal LA is available as 80 mg, 120 mg, and 160 mg capsules.

CLINICAL PHARMACOLOGY. INDERAL is a nonselective beta-adrenergic receptor blocking agent possessing no other autonomic nervous system activity. It specifically competes with beta-adrenergic receptor stimulating agents for available receptor sites. When access to beta-receptor sites is blocked by INDERAL, the chronotropic, inotropic, and vasodilator responses to beta-adrenergic stimulation are decreased proportionately.

INDERAL LA Capsules (80, 120, and 160 mg) release propranolol HCl at a controlled and predictable rate. Peak blood levels following dosing with INDERAL LA occur at about 6 hours and the apparent plasma half-life is about 10 hours. When measured at steady state over a 24-hour period the areas under the propranolol plasma concentration-time curve (AUCs) for the capsules are approximately 60% to 65% of the AUCs for a comparable divided daily dose of INDERAL tablets. The lower AUCs for the capsules are due to greater hepatic metabolism of propranolol, resulting from the slower rate of absorption of propranolol. Over a twenty-four (24) hour period, blood levels are fairly constant for about twelve (12) hours then decline exponentially.

INDERAL LA should not be considered a simple mg for mg substitute for conventional propranolol and the blood levels achieved do not match (are lower than) those of two to four times daily dosing with the same dose. When changing to INDERAL LA from conventional propranolol, a possible need for retitration upwards should be considered especially to maintain effectiveness at the end of the dosing interval. In most clinical settings, however, such as hypertension or angina where there is little correlation between plasma levels and clinical effect, INDERAL LA has been therapeutically equivalent to the same mg dose of conventional INDERAL as assessed by 24-hour effects on blood pressure and on 24-hour exercise responses of heart rate, systolic pressure and rate pressure product. INDERAL LA can provide effective beta blockade for a 24-hour period.

The mechanism of the antihypertensive effect of INDERAL has not been established. Among the factors that may be involved in contributing to the antihypertensive action are (1) decreased cardiac output, (2) inhibition of renin release by the kidneys, and (3) diminution of tonic sympathetic nerve outflow from vasomotor centers in the brain. Although total peripheral resistance may increase initially, it readjusts to or below the pretreatment level with chronic use. Effects on plasma volume appear to be minor and somewhat variable. INDERAL has been shown to cause a small increase in serum potassium concentration when used in the treatment of hypertensive patients.

In angina pectoris, propranolol generally reduces the oxygen requirement of the heart at any given level of effort by blocking the catecholamine-induced increases in the heart rate, systolic blood pressure, and the velocity and extent of myocardial contraction. Propranolol may increase oxygen requirements by increasing left ventricular fiber length, end diastolic pressure and systolic ejection period. The net physiologic effect of beta-adrenergic blockade is usually advantageous and is manifested during exercise by delayed onset of pain and increased work capacity.

In dosages greater than required for beta blockade, INDERAL also exerts a quinidine-like or anesthetic-like membrane action which affects the cardiac action potential. The significance of the membrane action in the treatment of arrhythmias is uncertain.

The mechanism of the antimigraine effect of propranolol has not been established. Beta-adrenergic receptors have been demonstrated in the pial vessels of the brain.

Beta receptor blockade can be useful in conditions in which, because of pathologic or functional changes, sympathetic activity is detrimental to the patient. But there are also situations in which sympathetic stimulation is vital. For example, in patients with severely damaged hearts, adequate ventricular function is maintained by virtue of sympathetic drive which should be preserved. In the presence of AV block, greater than first degree, beta blockade may prevent the necessary facilitating effect of sympathetic activity on conduction. Beta blockade results in bronchial constriction by interfering with adrenergic bronchodilator activity which should be preserved in patients subject to bronchospasm.

Propranolol is not significantly dialyzable.

INDICATIONS AND USAGE. Hypertension: INDERAL LA is indicated in the management of hypertension; it may be used alone or used in combination with other antihypertensive agents, particularly a thiazide diuretic. INDERAL LA is not indicated in the management of hypertensive emergencies.

Angina Pectoris Due to Coronary Atherosclerosis: INDERAL LA is indicated for the long-term management of patients with angina pectoris.

Migraine: INDERAL LA is indicated for the prophylaxis of common migraine headache. The efficacy of propranolol in the treatment of a migraine attack that has started has not been established and propranolol is not indicated for such use.

Hypertrophic Subaortic Stenosis: INDERAL LA is useful in the management of hypertrophic subaortic stenosis, especially for treatment of exertional or other stress-induced angina, palpitations, and syncope. INDERAL LA also improves exercise performance. The effectiveness of propranolol hydrochloride in this disease appears to be due to a reduction of the elevated outflow pressure gradient which is exacerbated by beta-receptor stimulation. Clinical improvement may be temporary.

CONTRAINDICATIONS. INDERAL is contraindicated in 1) cardiogenic shock; 2) sinus bradycardia and greater than first degree block; 3) bronchial asthma; 4) congestive heart failure (see WARNINGS) unless the failure is secondary to a tachyarrhythmia treatable with INDERAL.

WARNINGS. CARDIAC FAILURE: Sympathetic stimulation may be a vital component supporting circulatory function in patients with congestive heart failure, and its inhibition by beta blockade may precipitate more severe failure. Although beta blockers should be avoided in overt congestive heart failure, if necessary, they can be used with close follow-up in patients with a history of failure who are well compensated and are receiving digitalis and diuretics. Beta-adrenergic blocking agents do not abolish the inotropic action of digitalis on heart muscle.

IN PATIENTS WITHOUT A HISTORY OF HEART FAILURE, continued use of beta blockers can, in some cases, lead to cardiac failure. Therefore, at the first sign or symptom of heart failure, the patient should be digitalized and/or treated with diuretics, and the response observed closely, or INDERAL should be discontinued (gradually, if possible).

IN PATIENTS WITH ANGINA PECTORIS, there have been reports of exacerbation of angina and, in some cases, myocardial infarction, following abrupt discontinuance of INDERAL therapy. Therefore, when discontinuance of INDERAL is planned the dosage should be gradually reduced over at least a few weeks, and the patient should be cautioned against interruption or cessation of therapy without the physician's advice. If INDERAL therapy is interrupted and exacerbation of angina occurs, it usually is advisable to reinstitute INDERAL therapy and take other measures appropriate for the management of unstable angina pectoris. Since coronary artery disease may be unrecognized, it may be prudent to follow the above advice in patients considered at risk of having occult atherosclerotic heart disease who are given propranolol for other indications.

Nonallergic Bronchospasm (e.g., chronic bronchitis, emphysema)—PATIENTS WITH BRONCHOSPASTIC DISEASES SHOULD IN GENERAL NOT RECEIVE BETA BLOCKERS. INDERAL should be administered with caution since it may block bronchodilation produced by endogenous and exogenous catecholamine stimulation of beta receptors.

MAJOR SURGERY: The necessity or desirability of withdrawal of beta-blocking therapy prior to major surgery is controversial. It should be noted, however, that the impaired ability of the heart to respond to reflex adrenergic stimuli may augment the risks of general anesthesia and surgical procedures.

INDERAL (propranolol HCl), like other beta blockers, is a competitive inhibitor of beta-receptor agonists and its effects can be reversed by administration of such agents, e.g., dobutamine or isoproterenol. However, such patients may be subject to protracted severe hypotension. Difficulty in starting and maintaining the heartbeat has also been reported with beta blockers.

DIABETES AND HYPOGLYCEMIA. Beta-adrenergic blockade may prevent the appearance of certain premonitory signs and symptoms (pulse rate and pressure changes) of acute hypoglycemia in labile insulin-dependent diabetes. In these patients, it may be more difficult to adjust the dosage of insulin.

THYROTOXICOSIS: Beta blockade may mask certain clinical signs of hyperthyroidism. Therefore, abrupt withdrawal of propranolol may be followed by an exacerbation of symptoms of hyperthyroidism, including thyroid storm. Propranolol does not distort thyroid function tests.

IN PATIENTS WITH WOLFF-PARKINSON-WHITE SYNDROME, several cases have been reported in which, after propranolol, the tachycardia was replaced by a severe bradycardia requiring a demand pacemaker. In one case this resulted after an initial dose of 5 mg propranolol.

PRECAUTIONS. *General:* Propranolol should be used with caution in patients with impaired hepatic or renal function. INDERAL (propranolol HCl) is not indicated for the treatment of hypertensive emergencies.

Beta adrenoreceptor blockade can cause reduction of intraocular pressure. Patients should be told that INDERAL may interfere with the glaucoma screening test. Withdrawal may lead to a return of increased intraocular pressure.

Clinical Laboratory Tests: Elevated blood urea levels in patients with severe heart disease, elevated serum transaminase, alkaline phosphatase, lactate dehydrogenase.

DRUG INTERACTIONS: Patients receiving catecholamine-depleting drugs such as reserpine should be closely observed if INDERAL is administered. The added catecholamine-blocking action may produce an excessive reduction of resting sympathetic nervous activity which may result in hypotension, marked bradycardia, vertigo, syncopal attacks, or orthostatic hypotension.

Carcinogenesis, Mutagenesis, Impairment of Fertility: Long-term studies in animals have been conducted to evaluate toxic effects and carcinogenic potential. In 18-month studies in both rats and mice, employing doses up to 150 mg/kg/day, there was no evidence of significant drug-induced toxicity. There were no drug-related tumorigenic effects at any of the dosage levels. Reproductive studies in animals did not show any impairment of fertility that was attributable to the drug.

Pregnancy: Pregnancy Category C. INDERAL has been shown to be embryotoxic in animal studies at doses about 10 times greater than the maximum recommended human dose.

There are no adequate and well-controlled studies in pregnant women. INDERAL should be used during pregnancy only if the potential benefit justifies the potential risk to the fetus.

Nursing Mothers: INDERAL is excreted in human milk. Caution should be exercised when INDERAL is administered to a nursing woman.

Pediatric Use: Safety and effectiveness in children have not been established.

ADVERSE REACTIONS. Most adverse effects have been mild and transient and have rarely required the withdrawal of therapy.

Cardiovascular: bradycardia, congestive heart failure; intensification of AV block; hypotension; paresthesia of hands; thrombocytopenic purpura, arterial insufficiency, usually of the Raynaud type.

Central Nervous System: lightheadedness; mental depression manifested by insomnia, lassitude, weakness, fatigue; reversible mental depression progressing to catatonia; visual disturbances; hallucinations; an acute reversible syndrome characterized by disorientation for time and place, short-term memory loss, emotional lability, slightly clouded sensorium, and decreased performance on neuropsychometrics.

Gastrointestinal: nausea, vomiting, epigastric distress, abdominal cramping, diarrhea, constipation, mesenteric arterial thrombosis, ischemic colitis.

Allergic: pharyngitis and agranulocytosis, erythematous rash, fever combined with aching and sore throat, laryngospasm and respiratory distress.

Respiratory: bronchospasm.

Hematologic: agranulocytosis, nonthrombocytopenic purpura, thrombocytopenic purpura.

Auto-Immune: In extremely rare instances, systemic lupus erythematosus has been reported.

Miscellaneous: alopecia, LE-like reactions, psoriasiform rashes, dry eyes, male impotence, and Peyronie's disease have been reported rarely. Oculomucocutaneous reactions involving the skin, serous membranes and conjunctivae reported for a beta blocker (practolol) have not been associated with propranolol.

DOSAGE AND ADMINISTRATION. INDERAL LA provides propranolol hydrochloride in a sustained-release capsule for administration once daily. If patients are switched from INDERAL tablets to INDERAL LA capsules, care should be taken to assure that the desired therapeutic effect is maintained. INDERAL LA should not be considered a simple mg for mg substitute for INDERAL. INDERAL LA has different kinetics and produces lower blood levels. Retitration may be necessary especially to maintain effectiveness at the end of the 24-hour dosing interval.

HYPERTENSION—*Dosage must be individualized.* The usual initial dosage is 80 mg INDERAL LA once daily, whether used alone or added to a diuretic. The dosage may be increased to 120 mg once daily or higher until adequate blood pressure control is achieved. The usual maintenance dosage is 120 to 160 mg once daily. In some instances a dosage of 640 mg may be required. The time needed for full hypertensive response to a given dosage is variable and may range from a few days to several weeks.

ANGINA PECTORIS—*Dosage must be individualized.* Starting with 80 mg INDERAL LA once daily, dosage should be gradually increased at three to seven day intervals until optimum response is obtained. Although individual patients may respond at any dosage level, the average optimum dosage appears to be 160 mg once daily. In angina pectoris, the value and safety of dosage exceeding 320 mg per day have not been established.

If treatment is to be discontinued, reduce dosage gradually over a period of a few weeks (see WARNINGS).

MIGRAINE—*Dosage must be individualized.* The initial oral dose is 80 mg INDERAL LA once daily. The usual effective dose range is 160-240 mg once daily. The dosage may be increased gradually to achieve optimum migraine prophylaxis. If a satisfactory response is not obtained within four to six weeks after reaching the maximum dose, INDERAL LA therapy should be discontinued. It may be advisable to withdraw the drug gradually over a period of several weeks.

HYPERTROPHIC SUBAORTIC STENOSIS—80-160 mg INDERAL LA once daily.

PEDIATRIC DOSAGE—At this time the data on the use of the drug in this age group are too limited to permit adequate directions for use.

REFERENCES

1. Holland OB, Nixon JV, Kuhnert L: Diuretic-induced ventricular ectopic activity. *Am J Med* 1981;70:762-768. **2.** Holme I, Helgeland A, Hjermann I, et al: Treatment of mild hypertension with diuretics. The importance of ECG abnormalities in the Oslo study and in MRFIT. *JAMA* 1984;251:1298-1299.

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Golden Merit Award Recipients

At ceremonies held on May 3, 1985, during the 219th Annual Meeting of the Medical Society of New Jersey, at the Americana Host Farm Resort, Lancaster, Pennsylvania, the following physicians received MSNJ's Golden Merit Award indicating they held the degree of doctor of medicine for 50 years.

Atlantic County

Louis S. Fornasier, M.D. ..... Hahnemann '35

Bergen County

Paul F. Caruso, M.D. ..... Washington-St. Louis '35
Donald J. Kissinger, M.D. ..... Georgetown '35
Louis Landman, M.D. ..... Edinburgh '35
Frederick S. Leonard, Jr., M.D. ..... Georgetown '35
Walter Lichtenberg, M.D. ..... Maryland '35
Hugh E. McGee, Sr., M.D. ..... Long Island '35
Marianne Steinberg Ostrand, M.D. .. Dusseldorf '35
Nehemiah E. Smith, M.D. ..... Meharry '35
Charles G. Stetson, M.D. ..... Cornell '35

Burlington County

James Q. Atkinson, 2nd, M.D. ..... Hahnemann '35
R. Winfield Betts, M.D. ..... Hahnemann '35
T. Bruce Dickson, M.D. ..... Jefferson '35
Michael J. Morrone, M.D. ..... Hahnemann '35

Camden County

James N. Barroway, M.D. ..... Jefferson '35
Daniel H. Stephenson, M.D. ..... Jefferson '35
Emanuel Sufrin, M.D. ..... Jefferson '35
Bascom S. Waugh, M.D. ..... Meharry '35
H. Edward Yaskin, M.D. ..... Jefferson '35

Cumberland County

Sol Rosen, M.D. ..... Maryland '35
Louis E. Rosiello, M.D. ..... New York Medical '35

Essex County

Arthur Bernstein, M.D. ..... Pennsylvania '35
Frank Burstein, M.D. ..... Geneva '35
Orlando G. Caprio, M.D. ..... Syracuse '35
Anthony T. Caruso, M.D. .... George Washington '35
Frederick De Troia, M.D. ..... Jefferson '35
Lucien F. Della Fera, M.D. ..... St. Louis '35
Bernard B. Eichler, M.D. ..... Columbia '35
Samuel Einhorn, M.D. ..... Maryland '35
Robert P. Fruchtbaum, M.D. ..... Maryland '35
John S. Giardina, M.D. ..... New York Medical '35
Henry Green, M.D. ..... New York University '35
Harold Grubin, M.D. ..... New York University '35
Harry M. Holtz, M.D. ..... Duke '35
George L. Kline, Sr., M.D. ..... St. Louis '35
Saul Lieb, M.D. ..... Maryland '35
Donald Marcus, M.D. ..... Long Island '35
Harry B. McCluskey, M.D. ..... Jefferson '35
Thomas A. Messina, M.D. ..... Loyola '35
Walter L. Mitchell, Jr., M.D. ..... Johns Hopkins '35
Paul A. O'Connor, Sr., M.D. ..... Yale '35
Warren I. Reinhardt, M.D. ..... Harvard '35
Arnold Jay Rosenthal, M.D. ..... Zurich '35
Oscar J. Rosenthal, M.D. ..... Louisville '35
Jack G. Siegel, M.D. ..... Long Island '35
Christopher A. Smith, M.D. ..... Syracuse '35
Joseph Sorett, M.D. ..... Trinity-Dublin '35
Harry Taff, M.D. ..... England '35

William Taffet, M.D. ..... Syracuse '35
William F. Thornley, M.D. ..... Harvard '35
Francis S. Weinstein, M.D. .... New York Medical '35
Samuel A. Weiss, M.D. ..... St. Louis '35
John L. Work, M.D. ..... Columbia '35
Gabriel Yelin, M.D. ..... McGill '35

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Harry B. Lochhead, M.D. ..... Temple '35

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Morris Bresev, M.D. ..... Long Island '35
Joseph Freeman, M.D. ..... New York University '35
Harry Handler, M.D. ..... Dalhousie '35
Louis Kosminsky, M.D. ..... St. Andrews '35
Joseph Danford Mastromonaco, M.D. ... Bologna '35
Paul Joseph Miranti, M.D. ..... Queens '35
Samuel Prince, M.D. ..... Columbia '35
Cecil Frank Sabini, M.D. ..... Pisa '35
Juliana Clifford Swiney, M.D. ..... Columbia '35
Frank Rocco Visceglia, M.D. ..... Rome '35

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Emil A. Mondsen, M.D. ..... Montpellier '35

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Joseph Francis O'Neill, M.D. ..... Hahnemann '35
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Archibald Fishberg, M.D. .. New York University '35
William V. Gadek, M.D. ..... Georgetown '35
Charles W. Hoffman, M.D. ..... Jefferson '35
Louis L. Krafchik, M.D. ..... Rush '35
Zoltan Harold Lind, M.D. ..... Naples '35
Oscar J. Sokoloff, M.D. ..... Edinburgh '35

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Heins Wichman, M.D. ..... Cornell '35

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William Charney, M.D. ..... Dublin '35
Roy R. Ciccone, M.D. ..... New York University '35
Floyd Fortuin, M.D. ..... Cornell '35
Quinby Gurnee, M.D. ..... New York University '35
James V. Iraggi, M.D. ..... Rome '35
Hyman Jaffe, M.D. ..... Georgetown '35
Dora Joelson, M.D. ..... Woman's Medical '35
Michael L. Keller, M.D. ..... Maryland '35
Theodore Martin, M.D. ..... Dalhousie '35
Charles A. Priviteri, M.D. ..... New York Medical '35
Ezra Schlossberg, M.D. ..... Long Island '35
Leo Schwartz, M.D. ..... Arkansas '35
John Scillieri, M.D. ..... Cincinnati Eclectic '35
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Laurence Patrick Devlin, M.D. ..... Hahnemann '35

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Eva R. Sargent, M.D. ..... Vermont '35
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Max Solomon Black, M.D. ... Cincinnati Eclectic '35
Robert Peterson Boyd, M.D. ..... Temple '35
Samuel Henry Brethwaite, M.D.
..... Johns Hopkins '35
Nathan Solomon Deutsch, M.D. ..... Illinois '35
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Joseph Martin Gannon, M.D. ..... McGill '35
Fletcher Gilpin, M.D. ..... Pennsylvania '35
Lucien Hirsch, M.D. ..... McGill '35
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Sol Pollack, M.D. ..... California (San Francisco) '35
Bertold Salzmann, M.D. ..... Vienna '35
Fred F. Senerchia, Jr., M.D. .. New York Medical '35
William Work Widdowson, M.D. ..... Hahnemann '35
Ralph Arthur Young, M.D.
..... New York University '35

Warren County
Joseph Humbert, M.D. ..... Pennsylvania '35

DOCTORS' NOTEBOOK

Trustees' Minutes; UMDNJ Notes; MSNJ Auxiliary; New Members; Physicians Seeking Location in New Jersey

Trustees' Minutes April 14, 1985

A regular meeting of the Board of Trustees was held on Sunday, April 14, 1985, at the Executive Offices in Lawrenceville. Detailed minutes are on file with the secretary of your county society. A summary of significant actions follows:

Report of the President . . .
(1) HRET—Healthcare Information Network TV Programs . . . Noted that two taped television shows available through MSNJ were recommended for viewing: "Medicare Waiver" and "Biomedical Ethics and the Conroy Decision."
(2) NJ Commission on Aging—PRO Regulations . . . Noted Dr. Watson's suggestion that consideration be given to the development of a means for establishing an ongoing communication with senior citizens.

Report of Executive Director . . .
(1) SBME . . .
(a) Practice Identification—N.J.A.C. 13:35-6.1 . . . Noted that the practice identification rule was adopted by the SBME, offering licensed physicians a choice of permissible descriptive titles.
(b) Rule Proposal on Business Aspects of Medical Practice . . . Noted that MSNJ will draft a position statement regarding the commercial arrangements of medical practice in response to a SBME proposal.
(c) Delegation of Physical Modalities to Unlicensed Physician Aides—N.J.A.C. 13:35-6.14 . . . Noted that this adopted rule is acceptable to MSNJ.
(d) Rule Proposal on Standards of Practice for Physician Working with Nurse Anesthetist . . . Voted to refer the proposed nurse anesthetist rule to the specialty societies involved for input and directed that SBME be requested to withhold implementation of the proposed rule until a proper response can be developed by MSNJ.
(2) Resident Physician Members . . . Authorized expenditures of up to $1,000 for expenses of two or three resident physician members for AMA Annual Meeting.
(3) NJ State Medical Underwriters, Inc. . . . Approved the reappointment of Palma E. Formica, M.D., Henry J. Mineur, M.D., and Peter Sweetland to three-year terms on the Board of Directors; approved the appointment of Pascal A. Pironti, M.D., to the unexpired one-year term created by resignation of Dr. Todd; and noted that Dr. Fioretti announced his decision to have Dr. Slobodien reappointed as the president's designee on the Board of Directors.
(4) MSNJ Financial Statements . . . Reviewed and approved MSNJ's financial statements for the period ending March 31, 1985.

UMDNJ . . . Noted Dr. Bergen's comments on the following: a) new legislation which will require hospitals with graduate medical education programs to have at least 70 percent of the residency spots in primary care and 75 percent of participants in hospital programs must be domestic graduates; b) colocation project of United Hospitals is moving ahead; c) report on medical education in southern New Jersey should be an item for public discussion; and d) the disproportionate share of indigent patients in hospitals is a great concern.

Council on Legislation . . . Approved all the positions recommended by the Council for current state legislation except for the Rocco bill on fetal tissue (A-2584) which was referred back to the Council for reconsideration, and the Pankok bill on critical care specialty beds (A-3267) which was given conditional approval pending information from the sponsor.

Committee on Finance and Budget . . . Approved the following recommendations:

1) That the budget for the fiscal year beginning June 1, 1985, and ending May 31, 1986, in the amount of $2,936,000 with $2,125,000 to be raised through member assessments be adopted.
2) That the 1986 assessment be set at $295 per regular dues-paying member (1985 assessment—$275).
3) That the 1986 assessment be set at $40 per member for affiliate members (no longer practicing in New Jersey) (1985 assessment—$25).
4) That the 1986 assessment for associate members (interns-residents nonlicensed in New Jersey) be set at $25 per member (no change).
5) That there be an assessment for 1986 of $25 per member for licensed residents provided the individual is in a residency program entered upon within a reasonable time after his or her graduation from medical school (no change).
6) That the 1986 assessment be set at $10 per student for medical students (no change).

Committee on Impaired Physicians . . .
(1) Protocol for Dealing with the Chemically Dependent, Self-Referred Physician . . . Approved the following recommendation:

That the Board of Trustees approve the Protocol for dealing with the chemically dependent, self-referred physician.

(2) Impaired Professional's Program . . . Disapproved a recommendation for a proposed program for impaired professionals.

Committee on Medical Aspects of Sports . . . Disapproved the following recommendation:

That the Medical Society of New Jersey forward a letter to the New Jersey State Interscholastic Athletic Association, with a copy to the New Jersey Department of Education, recommending a change in the regulations to permit the use of orthoplast to stabilize minor injuries, it being lightweight, soft, and unusable as a weapon.

Ad Hoc Committee on Presentation of MSNJ DRG Position . . .
(1) Position Statement on DRG

Reimbursement . . . Adopted the following:

The Medical Society of New Jersey had taken a policy position in opposition to the DRG reimbursement system because of a concern over the widespread and premature implementation of a system whose impact upon the quality of care and cost effectiveness of health care had not been appropriately tested.

A major concern to this Society was the inherent potential for a reduction in services and inappropriate reductions in length of stay in an effort to maximize profit from a fixed prospective payment system. This clearly becomes a quality matter and should continue to be monitored.

The Society recognizes that New Jersey, as a unique participant in the system, currently enjoys a payment mechanism different from the national system, partly as a result of reimbursement for uncompensated care, thereby reducing the overall potential for some of the earlier concerns on quality of care. However, this unique status will in all likelihood terminate within three years.

Thus the Society, while recognizing certain potential cost-saving attributes of the DRG system and the value of the current waiver status to New Jersey hospitals, still maintains reservations on the overall impact this system has on quality of care and patient well-being.

New Jersey physicians will continue to cooperate with their hospitals regarding DRG, as long as the quality of patient care is not compromised. The Medical Society of New Jersey will continue to monitor the program and offer constructive recommendations, including changes in the prospective payment system, when appropriate, to assure the quality of care to our patients.

(2) Future Committee Activity . . . Approved the following two recommendations:

That the Ad Hoc Committee on Presentation of MSNJ DRG Position be discharged.

That an Ad Hoc Committee on Health Care Reimbursement Policies be created.

Old Business . . .

Guidelines for a Podiatry Department or Section . . . Postponed consideration of this issue until July.

New Business . . .

Proposed Rule on Pronouncement of Death . . . Noted that there was no objection to the proposed rule from the SBME regarding interpretation of term "attending physician" with respect to completion of death certificates.

Correspondence . . .

(1) Expiration Dates on Labels . . . Noted that the SBME supports MSNJ's position that all agencies dispensing prescribed medications must place the expiration date of the prescribed medication on the label of the container.

(2) Release of Malpractice Reports to the Public . . . Noted that the Attorney General's Office is looking into the MSNJ concern that questions if malpractice incident reports filed with SBME insurance companies should be released to the public.

(3) Professional Liability Insurance Premium Discount (Resolution #3, 1984) . . . Noted that Princeton Insurance Company stated it was not feasible at present to grant discounts for physicians completing risk prevention programs.

UMDNJ Notes

Stanley S. Bergen, Jr., M.D.
President

Herbert A. Roemmele, chairman of the UMDNJ Board of Trustees, and I met in Washington with members and staff of the New Jersey delegation in Congress to tell them of our concerns about the proposed federal budget.

Five members of the delegation—Representatives James Courter, Dean Gallo, Frank Guarini, William Hughes, and James Saxton—were present during the congressional delegation breakfast, and others were represented by staff members. In addition, we had individual meetings with Senator Frank Lautenberg and Congressmen Bernard Dwyer, James Florio, Matthew Rinaldo, and Frank Guarini, as well as with Senator Bill Bradley's health staff members.

We are hopeful that Congress will ease some of the serious problems that we at UMDNJ see in the budget, a view that is shared by higher education and health institutions throughout the nation. For example, the proposals to cut student aid create exceptional difficulties for health sciences universities like UMDNJ because of the high cost of educating physicians, dentists, and other health professions. Plans to restrict student aid would result in a dollar loss to UMDNJ students of more than $5 million. To the people of New Jersey, these proposals mean the possible loss of educational opportunities for our young citizens. This is a loss that neither UMDNJ nor the state can afford.

Federal recommendations for reducing Medicare and Medicaid expenditures impact most seriously on UMDNJ, both as a provider of health care and as a teaching institution.

Proposals to freeze Medicare reimbursement of direct graduate medical education costs and to cut in half the payment for indirect costs will have a significant negative impact on our graduate programs for residents and result in higher payroll costs for medical centers like University Hospital.

Another concern is the prospective reduction in the National Institutes of Health budget and the number of research grants awarded. A young institution like UMDNJ is highly dependent upon NIH funding of basic and clinical scientific research. Over the past ten years, our support from NIH has grown from $2 million to $12 million and constitutes nearly 65 percent of all UMDNJ grant support. NIH investment supports UMDNJ research in cancer, birth defects, AIDS, heart disease, environmental hazards, and other health problems. This research already has advanced the health and economic vigor of New Jersey.

The National Residency Matching Program, which took place in March, placed medical school seniors in graduate medical education programs. Of approximately 300 UMDNJ seniors at Rutgers Medical School, Rutgers Medical School at Camden, and New Jersey Medical School, 97 will continue their postgraduate education in New Jersey. Among the remaining seniors, the majority will go to Pennsylvania or New York hospitals. More than 80 percent of the 43 seniors at the School of Osteopathic Medicine obtained residencies in New Jersey.

Medicine was the most popular residency chosen by seniors in M.D. programs (126), followed by surgery (47), family medicine (31), and obstetrics/gynecology (28). Other popular specialties were pediatrics, radiology, orthopedics, and anesthesiology.

Among the out-of-state institutions "matched" with UMDNJ graduates are Yale, Johns Hopkins, Massachusetts General, Cleveland Clinic, University of Pennsylvania and UCLA.

MSNJ Auxiliary

Mrs. Bernardine Moloney is the newly elected president of the Medical Society of New Jersey Auxiliary. A native Philadelphian, she attended Chestnut Hill College and the Hahnemann Hospital School of X-Ray Technology, becoming a registered x-ray technician.

Bernardine's husband, Charles, is a pediatrician and practices in Moorestown. They have five children: Charles Jr., Eileen, Michael, Margaret, and Daniel.

Mrs. Moloney is president of the Board of Trustees of the Visiting Homemaker and Health Services, Inc., having been a long-time member of the Board and Assistant Director from 1981 to 1983. Bernardine also is an active member of the Curtis Auxiliary at the Memorial Hospital of Burlington.

Her MSNJ Auxiliary involvement includes many county chairmanships, first and second vice-president, and two terms as president of the Burlington County Medical Society Auxiliary from 1974 to 1976.

At the state level, Mrs. Moloney served as state chairman of International Health, Health Careers, AMA-ERF, and Convention. Elected



Mrs. Charles J. Moloney

to the office of corresponding secretary and vice-president for two terms, she served as membership chairman and as president-elect conducted the state workshop.

Bernardine and her husband are active participants in all county Medical Society and Auxiliary events. Her hobbies include music, bridge, bowling, tennis, collecting regional cookbooks, and trying the recipes.

New Members

The Journal of the Medical Society of New Jersey would like to welcome the following new members:

Atlantic County
Gloria S. Durelli, M.D., Margate City
Ronald L. Gerson, M.D., Hammonton
Jeffrey S. Pollack, M.D., Mays Landing

Bergen County
Robert J. Andrus, M.D., North Arlington
Jeffrey P. Barasch, M.D., Franklin Lakes
Robert J. Barbalinardo, M.D., Lyndhurst
Kevin R. Basralian, M.D., Hasbrouck Heights
James V. Bastek, M.D., Paramus
David P. Bleeker, M.D., Wood-Ridge
Glenn R. Brauntuch, M.D., Englewood
Stephen H. Chenen, M.D., Teaneck
Peter J. DeMauro, M.D., Paramus
Scott E. Eder, M.D., Palisades Park
Kenneth S. Fried, M.D., Englewood
James T. Goodrich, M.D., Englewood
Mark A. Hartzband, M.D., Hackensack
Morris Horwitz, M.D., Haworth
John E. Kingsley, M.D., Englewood
Charles E. Kordula, M.D., Ridgewood
Anne Butler Krementz, M.D., Englewood
Paul A. Liva, M.D., Hackensack
Hung-Tien Lo, M.D., Hackensack
Joel S. Nizin, M.D., Fair Lawn
Peri Ann Petras, M.D., Hackensack
Dennis L. Pfisterer, M.D., Teaneck
Melvin S. Polkow, M.D., Hackensack
Donald O. Quest, M.D., Ridgewood
Jay Samuel Rosen, M.D., Hackensack
Michael P. Scrimenti, M.D., Lodi
Anthony I. Sebba, M.D., Teaneck
James C. Van Elswyk, M.D., Englewood
Ignatios S. Zairis, M.D., Englewood

Burlington County
Andrew J. Collier, M.D., Moorestown
David L. Neidorf, M.D., Medford
Aurora C. Noriega, M.D., Mount Laurel
Stephen J. Pilipshen, M.D., Mount Holly
Kenneth H. Soll, M.D., Cherry Hill

Camden County
Lenora R. Barot, M.D., Camden
Robert A. Carabelli, M.D., Pennsauken
David Cypel, M.D., Cherry Hill
John P. Kohler, M.D., Audubon
John N. Larson, D.O., Stratford
A. Gregory McClure, M.D., Haddonfield
Daniel J. Ragone, M.D., Haddonfield
James M. Stanch, M.D., Westmont
Harvey L. Waxman, M.D., Camden
Laura Sandra Willingmyre, M.D., Pennsauken

Cape May County
Richard M. Lawinski, M.D., Wildwood

Cumberland County
Robert C. Davies, M.D., Millville
David M. Rogovitz, M.D., Millville
Debra D. Weissbach, M.D., Vineland

Essex County
Nicole E. Cohen-Addad, M.D., Newark
Eric N. Fein, M.D., Livingston
Rosario Guarino, M.D., West Orange
Scott J. Hopkins, M.D., Montclair
Anthony F. Jahn, M.D., Roseland
Jacques G. Losman, M.D., Newark
George W. Miller, Jr., M.D., Montclair
Albert G. Mylod, Jr., M.D., Roseland
Richard A. Rosa, M.D., So. Orange
Gary I. Schecter, M.D., Verona
Eli M. Shapiro, M.D., W. Orange
Charles E. Spingola, M.D., Cedar Grove
Sharlene M. Watts, M.D., Nutley
Eleftherios G. Zisis, M.D., Fort Lee



MSNJ Past-President Frank Watson accepted a plaque from **Dr. John Coury,** Chairman of the AMA Board of Trustees, honoring the **Medical Society of New Jersey** for its increase in AMA membership for the fourth consecutive year.

Gloucester County
Eliot F. Kaplan, M.D., Sewell

Hudson County
Kenyon B. Field, M.D., Jersey City
Keith G. Gurland, M.D., Bayonne
Hector Tomas Rubinstein, M.D., Union City
Deepak O. Shah, M.D., Jersey City

Hunterdon County
James A. Fox, M.D., Somerville
Ira R. Morganstern, M.D., Asbury

Mercer County
Laureto S. Bada, Jr., M.D., Trenton
Douglas J. Binder, M.D., New York, NY
Alphonse Del Pizzo, M.D., Trenton
Yusaf M. Khan, M.D., Trenton
Steven L. Meshkov, M.D., Trenton
Reynaldo C. Santos, M.D., Trenton

Middlesex County
Noah Barysh, M.D., Jamesburg
Mona R. Bomgaars, M.D., New Brunswick
Khagendra M. Chatterjee, M.D., Woodbridge
Michael B. Gehl, M.D., New Brunswick
Aftab Husain, M.D., Edison
Stanley M. Kron, M.D., New Brunswick
Robert M. Pickoff, M.D., New Brunswick
Gary B. Steinbach, M.D., Perth Amboy
Shubhangi J. Thakur, M.D., Edison
Sharon D. Warner, M.D., Spotswood

Monmouth County
Said A. Abou-Samra, M.D., Holmdel
Fe L. Almazen-Condit, M.D., Neptune
Michael G. Ashkar, M.D., Asbury Park
Raja Barakat, M.D., Hazlet
Maria del Basora-Ruiz, M.D., Long Branch
Michael W. Bickerton, M.D., Red Bank
Robert H. Bleicher, M.D., Freehold
Jerry Boorstein, D.O., Englishtown
Kenneth M. Chekofsky, M.D., Long Branch
Donald P. Ferri, M.D., Long Branch
Susan R. Friedman, M.D., Monmouth Beach
Sivasubramaniam Gopalakrishnan, M.D., Neptune
Rose F. Hayet, M.D., Ocean
Jyotika D. Joshi, M.D., Matawan
Thomas A. Kedersha, M.D., Neptune
Frank S. Komorowski, M.D., Ocean
Janani K. Krishna, M.D., Holmdel
Bruce J. Langner, M.D., Long Branch
Barton M. Nassberg, M.D., Long Branch
Suvarna P. Parikh, M.D., Marlboro
Mark A. Rosenbloom, M.D., Neptune City
Andrew L. Saporito, M.D., Sea Girt
Ellen F. Soefer, M.D., Red Bank
John F. Sperling, M.D., Long Branch
Gary B. Sullivan, M.D., Neptune
Patricia A. Young, M.D., Neptune

Morris County
Arthur C. Brown, M.D., Morristown
Eric D. DiGiacomo, M.D., Florham Park
Gerald Dunham, M.D., Morristown
Jeffrey S. Nahmias, M.D., Florham Park
Lee J. Suckno, M.D., Denville
David L. Taylor, M.D., Morristown
Berton Taffet, M.D., Morristown
Jeffrey A. Wexler, M.D., Denville
Paul H. Wichman, M.D., Morris Plains

Ocean County
Roland L. Belluscio, M.D., Lakewood
Glenn I. Bernstein, M.D., Bricktown
Richard E. Fernandez, M.D., Lakewood
William F. Kennard, M.D., Manahawkin
Vincent J. Vivona, D.O., Bricktown

Passaic County
Martin J. Corso, M.D., Lincoln Park
Manju Gupta, M.D., Hawthorne
Ching C. Hsieh, M.D., Passaic
Richard J. Wein, M.D., Passaic
Alexander F. Zolli, M.D., Clifton

Salem County
Craig Benedict Quigley, M.D., Carneys Point
Shaukat M. Qureshi, M.D., Salem
Joseph B. Zehner, M.D., Woodstown

Sussex County
John L. Berger, M.D., Newton
John F. Fisher, M.D., Sussex
Barry I. Franklin, M.D., Newton
Mark S. Madis, M.D., Vernon
Birur M. Shivashankara, M.D., Hamburg
Linda C. Vickery, M.D., Sussex

Union County
Rodolfo Colaco, M.D., Elizabeth
Barry M. Elkind, M.D., Springfield
Stephen M. Golden, M.D., Summit
Walter L. Groff, M.D., Summit
Richard P. Mackessy, M.D., Linden
Samiappan Muthusamy, M.D., Roselle
Steven L. Nehmer, M.D., Summit
Robert M. Paull, M.D., Summit
Edward S. Rittweger, M.D., Rahway
Apostolos A. Paul Rossos, M.D., Union
Jeffrey Soffer, M.D., Warren
Dennis R. Solomon, D.O., Fanwood
Jay M. Tendler, M.D., Elizabeth

Physicians Seeking Location in New Jersey

The following physicians have written to the Executive Offices of MSNJ seeking information on possible opportunities for practice in New Jersey. The information listed below has been supplied by the physician. If you are interested in any further information concerning these physicians, we suggest you make inquiries to them.

ALLERGY—Noah Barysh, M.D., 603A Old Nassau Rd., Jamesburg, NJ 08831. Chicago 1933. Board certified. Part time, 15 hrs/wk. Available.

ANESTHESIOLOGY—Howard Yap Ang, M.D., 2957 Decatur Ave., Apt. C-43, Bronx, NY 10458. Far Eastern University 1976. Board eligible. Solo, partnership, group. Available.

Vasant Chheda, M.D., 950 49th St., Apt. 8K, Brooklyn, NY 11219. G.S. Medical College (India) 1978. Fee-for-service, solo, group, partnership. Available.

John James, M.D., 950 49th St., Apt. 8K, Brooklyn, NY 11219. G.S. Medical College 1978. Solo, partnership, fee-for-service, group. Available.

CARDIOLOGY—Bruce Klein, M.D., 438A Willow Turn, Mt. Laurel, NJ 08054. SUNY-Downstate 1977. Also, pediatrics. Board certified (PD). Group, HMO, hospital. Available.

DERMATOLOGY—Rami Ephraim Geffner, M.D., 1139 N. Church St., Apt. A-3, Greensboro, NC 27401. UMDNJ 1979. Group, solo, partnership. Available.

FAMILY MEDICINE—Shahida Asifudin, M.D., 902 47th St., #LB5, Brooklyn, NY 11219. Osmania (India) 1976. Group, partnership, solo. Available.

Bruce A. Blumenthal, M.D., 5813 Berkeley Ave., Baltimore, MD 21215. George Washington 1978. Board certified. Group or partnership. Available July 1985.

Mark T. Bright, M.D., 1718 Afton Ave., Charleston, SC 29407. Georgetown 1978. Board certified. Group or partnership. Available September 1985.

Steven Luke, M.D., 3246 Abell Ave., Baltimore, MD 21218. SUNY 1982. Board eligible. Group or HMO. Available July 1985.

Daniel Nuchovich, M.D., 1006 Bay Drive, #702, Miami Beach, FL 33141. University of Uruguay, 1980. Health center, hospital, underserved area. Available.

GASTROENTEROLOGY—Pravin N. Patel, M.D., 15 St. Andrew's Pl., #25, Yonkers, NY 10705. Baroda (India) 1974. Also, internal medicine. Board certified (IM). Group, partnership, solo. Available July 1985.

INTERNAL MEDICINE—Yvonne D'Souza, M.D., 315 Ave., C, #7C, New York, NY 10009. Topiwalla National (India) 1972. Board eligible. Partnership. Available September 1985.

Leonid Goldin, M.D., 1802 Ocean Pkwy., Apt. D2, Brooklyn, NY 11223. Kursk (USSR) 1968. Group, hospital, nursing home, institution. Available.

Frederic M. Heitzer, M.D., 3rd Ave., 160B Borden Apts., Long Branch, NJ 07740. UMDNJ 1982. Group, partnership, clinic, industry. Available July 1985.

Marvin H. Lerner, M.D., 233 E. 32 St., #4J, New York, NY 10016. Universidad Autonoma (Mexico) 1982. Board eligible. Group, partnership, solo. Available July 1985.

James C. McVeety, M.D., 713 South Birch Ave., Marshfield, WI 54449. Bologna 1975. Also, neurology. Board certified (IM); board eligible (N). Group, partnership, solo. Available.

Surendra K. Nevatia, M.D., 21 Heywood St., #2E, Worcester, MA 01604. Mahat-

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ma Gandhi Memorial (India) 1976. Solo, group, partnership. Available July 1985.

Pravin N. Patel, M.D., 15 St. Andrew's Pl., #25, Yonkers, NY 10705. Baroda (India) 1974. Also, gastroenterology. Board certified (IM). Group, partnership, solo. Available July 1985.

Mohamed Salem, M.D., 44 S. Munn Ave., East Orange, NJ 07018. Al Azhar (Egypt) 1977. Also, nephrology. Solo, group, clinic, hospital. Available.

Z. Shamma-Othman, M.D., 533 Evergreen Ct., Bensalem, PA 19020. Baghdad University (Iraq) 1979. Group or partnership. Available July 1985.

NEPHROLOGY—Mohamed Salem, M.D., 44 S. Munn Ave., East Orange, NJ 07018. Al Azhar (Egypt) 1977. Also, internal medicine. Solo, group, clinic, hospital. Available.

NEUROLOGY—Jaime Lim, M.D., Summit Park East, Apt. F-1, 8201 Henry Ave., Philadelphia, PA 19128. University of the East 1980. Group or solo. Available July 1985.

James C. McVeety, M.D., 713 South Birch Ave., Marshfield, WI 54449. Bologna 1975. Also, internal medicine. Board eligible (N); board certified (IM). Group, partnership, solo. Available.

NUCLEAR MEDICINE—William Ganz, M.D., 7476 Ahern Ct., University City, MO 63130. Also, radiology. Hospital or group. Available July 1985.

PATHOLOGY—Adam G. Lang, M.D., 1436 Armacost Ave., Apt. 9, Los Angeles, CA 90025. Illinois 1980. Group or partnership. Available July 1985.

PEDIATRICS—Bruce Klein, M.D., 438A Willow Turn, Mt. Laurel, NJ 08054. SUNY-Downstate 1977. Also, cardiology. Board certified. Group, HMO, hospital. Available.

Edgar Lyubling, M.D., 1401 Ocean Ave., Apt. 4H, Brooklyn, NY 11230. Moscow USSR 1967. Group or partnership. Available July 1985.

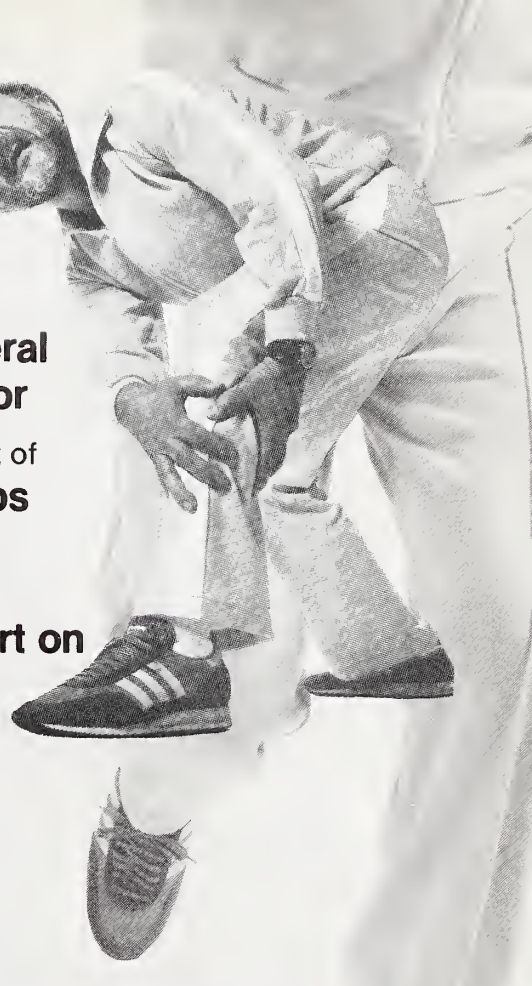
Boroumand Masood, M.D., 85-26 Van Wyck Expwy., Apt. 412, Briarwood, NY 11435. Tehran (Iran) 1968. Board certified. Group, partnership, solo, hospital. Available.

Pronoti Nigam, M.D., 24 Hart Blvd., Flemington, NJ 08822. Kanpur (India). Board eligible. Group or partnership. Available.

RADIOLOGY—William Ganz, M.D., 7476 Ahern Ct., University City, MO 63130. Also, nuclear medicine. Hospital or group. Available July 1985.

SURGERY—Dan S. Reiner, M.D., 7028 Waterman Ave., St. Louis, MO 63130. St. Louis 1980. Board eligible. Group or partnership. Available July 1985.

UROLOGY—Barry R. Shepard, M.D., 30 So. Central Ave., Valley Stream, NY 11580. SUNY 1979. Board eligible. Available.



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Riboflavin (B-2).....2 mg.
Pyridoxine HCL (B-6) .....10 mg.
DOSE: 1 to 3 tablets daily.
AVAILABLE: Bottles of 100, 500.

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Riboflavin (B-2).....2 mg.
Pyridoxine HCL (B-6) .....10 mg.
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A professional service message from the
Medical Inter-Insurance Exchange of New Jersey
Two Princess Road, Lawrenceville NJ 08648
(609) 896-2404.

CME CALENDAR

The following is a list of continuing medical education courses for the next two months. Contact the sponsoring organization for further information.

This list is compiled through the cooperation of the Committee on Medical Education of the Medical Society of New Jersey, The Academy of Medicine of New Jersey, the New Jersey Chapter of the American Academy of Family Physicians, and the Office of Continuing Medical Education of the UMDNJ. For information on accreditation, please contact the sponsoring organization(s), indicated by italics—last line of each item.

MEDICINE

July

3 **Use and Abuse of Pregnancy Tests**

17 **Common Skin Problems**
1:30-2:30 P.M.—Rutgers Community Health Plan, 57 U.S. Hwy. 1, New Brunswick
(Rutgers Community Health Plan and AMNJ)

4 **Nephrology Grand Rounds**
6:30-7:30 P.M.—Community Memorial Hospital, Toms River
(Community Memorial Hospital and AMNJ)

5 **Multidisciplinary Cancer Conference**
11 A.M.-12 noon—Walkill Valley General Hospital Annex, Sussex
(Walkill Valley General Hospital and AMNJ)

August

2 **Multidisciplinary Cancer Conference**
11 A.M.-12 noon—Wallkill Valley General Hospital Annex, Sussex
(Wallkill Valley General Hospital and AMNJ)

7 **Common ENT Problems**

21 **Chronic Pain**
1:30-2:30 P.M.—Rutgers Community Health Plan—57 U.S. Hwy. 1, New Brunswick
(Rutgers Community Health Plan and AMNJ)

NEUROLOGY/PSYCHIATRY

July

11 **Usefulness of Antidepressant Plasma Levels and Cardiovascular Implications**

18 **Research Update: Aging, The Elderly, and E.C.T.**
11 A.M.-12 noon—Carrier Foundation, Belle Mead
(Carrier Foundation)

ACUPUNCTURE IN CLINICAL PRACTICE

N.Y. State Boards of Medicine & Dentistry 25-hour accredited seminar and workshop on the latest theories & techniques of manual & electro-acupuncture and TENS, applicable toward the 200-hour requirement for certification, will be given for licensed clinicians (with or without prior training) during the weekend of July 12-14, 1985 at the Barbizon Plaza Hotel, New York City. International Symposium on Acupuncture & Electro-Therapeutics at New York Pental Hotel, Oct. 9-13, 1985. Co-sponsored by the International College of Acupuncture & Electro-Therapeutics, its official journal, Acupuncture & Electro-Therap. Res., Int.J. (published by Pergamon Press and Indexed in 15 major indexing periodicals; INDEX MEDICUS, etc.), the Heart Disease Research Foundation and the Neuroscience Dept. of Long Island College Hospital, Pharmacology Dept. of The Chicago Medical School. Also eligible for AMA/CME credit. For information, contact Y. Omura, M.D., ScD., 800 Riverside Drive (8-1), NYC 10032. Tel: (212) 781-6262 or (212) WA8-0658, or Saul Heller, M.D., Tel: (212) 838-7514.

LETTERS TO THE EDITOR

PRO-NJ;
Semen Donors

PRO-NJ

March 26, 1985

Dear Doctor Krosnick:

With great interest I read Dr. David Kingsley's article in the March 1985 issue of *The Journal*. Dr. Kingsley is president of the new Peer Review Organization of New Jersey, Inc. (PRO-NJ). I have been active in PSRO affairs for many years and happen to be one who believes strongly that physician control and representation should permeate all PRO activities to the greatest extent possible. Therefore, I feel obligated to criticize some aspects of Dr. Kingsley's article, and to comment on your editorial concerning the same subject.

In Southern New Jersey PSRO's eagerness to take control of the statewide PRO-NJ, it failed completely in its obligation to seek representation from as many physicians as possible in our state:

1. The PRO-NJ Board contains only physicians from the southern half of New Jersey.

2. The medical directors are from southern New Jersey.

3. Dr. Kingsley's statements that physician criteria-establishing committees have "Representative physicians from all parts of the state . . ." and ". . . the review processes and objectives are derived by physicians from each local community . . ." completely ignore the fact that at least four counties in the northern part of our state have been deprived of membership on any of these committees.

4. Your editorial in the same issue of *The Journal* points out that "Those who have received the criteria (for admission and length of stay decision) have been satisfied by some but appalled with others." This statement reflects sincere concern by many physicians for the way in which these PRO-NJ criteria have been developed.

These facts are a sad comment on the way PRO-NJ has begun exercising its responsibilities on behalf of New Jersey's physicians.

We only can hope that Dr. Kingsley, with the officers and members of his Board of Trustees and their medical directors, will immediately endeavor to correct these discrepancies, and in the future will act in a truly democratic manner in the best interests of the majority of New Jersey physicians.

(signed) Donald P. Burt, M.D.
Medical Director, PSRO

Semen Donors

March 27, 1985

Dear Doctor Krosnick:

Semen donation for artificial insemination is a common practice today. At present, the semen is frozen but is not screened for viruses, cytomegalovirus, herpes simplex, mumps, or H.T.L.V. III (AIDS) viruses, which have been isolated from semen. Thus far, there are no reported donor semen infections transmitted to the mother or fetus and hence my concern merely is speculative. It is estimated that 30 percent of sperm donors are homosexual and to a lesser extent drug addicts. Furthermore, in our experience, most men today have higher neutrophil counts in the semen than men had ten years ago. This probably indicates that there is a chronic infection somewhere in the ejaculation process.

It would appear that the sperm donors must be screened more carefully before a tragedy takes place with H.T.L.V. III and herpes simplex. With the incubation period of three to five years for the H.T.L.V., this new syndrome may not be apparent for some time.

I recommend that all semen donors be screened as scrupulously as blood donors. Homosexual and bisexual drug addicts, hemophiliac, and Haitian men should be barred by law from donating semen. All donor semen samples should be examined for H.T.L.V., C.M.V., and herpes simplex virus before insemination. The serum of donor men also must be tested for H.T.L.V. and C.M.V. antibody and all those with a positive serology should be prevented from donating semen until more information is available.

This approach is equally important for organ donors.

(signed) Leon G. Smith, M.D.

REFERENCES

1. Penn I, Ogden D, Halgrimson CG, et al.: The use of living donors in kidney transplantation in man. *Arch Surg* 101:226-231, 1970.

2. Mather-Wagh U, Enlow RW, Spigland I, et al.: Longitudinal study of persistent generalized lymphadenopathy in homosexual men: Relation to acquired immunodeficiency syndrome. *Lancet* 1:1033-1038, 1984.

3. The cause of AIDS? *Lancet* 1:1053-1054, 1984.

4. Anderson CB, Tyler JD, Sicard GA, et al.: Pretreatment of renal allograft recipients with immunosuppression and donor specific blood. *Transplantation* (in press).

5. Slive L: Should homosexuals be organ donors? *JAMA* 18:2625, 1984.

BALANCED CALCIUM CHANNEL BLOCKADE!



Low incidence of side effects
CARDIZEM® (diltiazem HCl) produces an incidence of adverse reactions not greater than that reported with placebo therapy, thus contributing to the patient's sense of well-being.

*Cardizem is indicated in the treatment of angina pectoris due to coronary artery spasm and in the management of chronic stable angina (classic effort-associated angina) in patients who cannot tolerate therapy with beta-blockers and/or nitrates or who remain symptomatic despite adequate doses of these agents.

References:
1. Strauss WE, McIntyre KM, Parisi AF, et al: Safety and efficacy of diltiazem hydrochloride for the treatment of stable angina pectoris: Report of a cooperative clinical trial. Am J Cardiol 49:560-566, 1982.
2. Pool PE, Seagren SC, Bonanno JA, et al: The treatment of exercise-inducible chronic stable angina with diltiazem: Effect on treadmill exercise. Chest 78 (July suppl):234-238, 1980.

Reduces angina attack frequency*
42% to 46% decrease reported in multicenter study.[1]

Increases exercise tolerance*
In Bruce exercise test,[2] control patients averaged 8.0 minutes to onset of pain; Cardizem patients averaged 9.8 minutes ($P<.005$).

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(diltiazem HCl)

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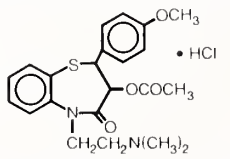
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PROFESSIONAL USE INFORMATION

cardizem®
(diltiazem HCl)
30 mg and 60 mg tablets

DESCRIPTION

CARDIZEM® (diltiazem hydrochloride) is a calcium ion influx inhibitor (slow channel blocker or calcium antagonist). Chemically, diltiazem hydrochloride is 1,5-Benzothiazepin-4(5H)one,3-(acetyloxy) -5-[2-(dimethylamino)ethyl]-2,3-dihydro-2-(4-methoxyphenyl)-, monohydrochloride,(+) -cis-. The chemical structure is:



Diltiazem hydrochloride is a white to off-white crystalline powder with a bitter taste. It is soluble in water, methanol, and chloroform. It has a molecular weight of 450.98. Each tablet of CARDIZEM contains either 30 mg or 60 mg diltiazem hydrochloride for oral administration.

CLINICAL PHARMACOLOGY

The therapeutic benefits achieved with CARDIZEM are believed to be related to its ability to inhibit the influx of calcium ions during membrane depolarization of cardiac and vascular smooth muscle.

Mechanisms of Action. Although precise mechanisms of its antianginal actions are still being delineated, CARDIZEM is believed to act in the following ways:

1. Angina Due to Coronary Artery Spasm: CARDIZEM has been shown to be a potent dilator of coronary arteries both epicardial and subendocardial. Spontaneous and ergonovine-induced coronary artery spasm are inhibited by CARDIZEM.
2. Exertional Angina: CARDIZEM has been shown to produce increases in exercise tolerance, probably due to its ability to reduce myocardial oxygen demand. This is accomplished via reductions in heart rate and systemic blood pressure at submaximal and maximal exercise work loads.

In animal models, diltiazem interferes with the slow inward (depolarizing) current in excitable tissue. It causes excitation-contraction uncoupling in various myocardial tissues without changes in the configuration of the action potential. Diltiazem produces relaxation of coronary vascular smooth muscle and dilation of both large and small coronary arteries at drug levels which cause little or no negative inotropic effect. The resultant increases in coronary blood flow (epicardial and subendocardial) occur in ischemic and nonischemic models and are accompanied by dose-dependent decreases in systemic blood pressure and decreases in peripheral resistance.

Hemodynamic and Electrophysiologic Effects. Like other calcium antagonists, diltiazem decreases sinoatrial and atrioventricular conduction in isolated tissues and has a negative inotropic effect in isolated preparations. In the intact animal, prolongation of the AH interval can be seen at higher doses.

In man, diltiazem prevents spontaneous and ergonovine-provoked coronary artery spasm. It causes a decrease in peripheral vascular resistance and a modest fall in blood pressure and, in exercise tolerance studies in patients with ischemic heart disease, reduces the heart rate-blood pressure product for any given work load. Studies to date, primarily in patients with good ventricular function, have not revealed evidence of a negative inotropic effect; cardiac output, ejection fraction, and left ventricular end diastolic pressure have not been affected. There are as yet few data on the interaction of diltiazem and beta-blockers. Resting heart rate is usually unchanged or slightly reduced by diltiazem.

Intravenous diltiazem in doses of 20 mg prolongs AH conduction time and AV node functional and effective refractory periods approximately 20%. In a study involving single oral doses of 300 mg of CARDIZEM in six normal volunteers, the average maximum PR prolongation was 14% with no instances of greater than first-degree AV block. Diltiazem-associated prolongation of the AH interval is not more pronounced in patients with first-degree heart block. In patients with sick sinus syndrome, diltiazem significantly prolongs sinus cycle length (up to 50% in some cases).

Chronic oral administration of CARDIZEM in doses of up to 240 mg/day has resulted in small increases in PR interval, but has not usually produced abnormal prolongation. There were, however, three instances of second-degree AV block and one instance of third-degree AV block in a group of 959 chronically treated patients.

Pharmacokinetics and Metabolism. Diltiazem is absorbed from the tablet formulation to about 80% of a reference capsule and is subject to an extensive first-pass effect, giving an absolute bioavailability (compared to intravenous dosing) of about 40%. CARDIZEM undergoes extensive hepatic metabolism in which 2% to 4% of the unchanged drug appears in the urine. In vitro binding studies show CARDIZEM is 70% to 80% bound to plasma proteins. Competitive ligand binding studies have also shown CARDIZEM binding is not altered by therapeutic concentrations of digoxin, hydrochlorothiazide, phenylbutazone, propranolol, salicylic acid, or warfarin. Single oral doses of 30 to 120 mg of CARDIZEM result in detectable plasma levels within 30 to 60 minutes and peak plasma levels two to three hours after drug administration. The plasma elimination half-life following single or multiple drug administration is approximately 3.5 hours. Desacetyl diltiazem is also present in the plasma at levels of 10% to 20% of the parent drug and is 25% to 50% as potent a coronary vasodilator as diltiazem. Therapeutic blood levels of CARDIZEM appear to be in the range of 50 to 200 ng/ml. There is a departure from dose-linearity when single doses above 60 mg are given; a 120-mg dose gave blood levels three times that of the 60-mg dose. There is no information about the effect of renal or hepatic impairment on excretion or metabolism of diltiazem.

INDICATIONS AND USAGE

1. **Angina Pectoris Due to Coronary Artery Spasm.** CARDIZEM is indicated in the treatment of angina pectoris due to coronary artery spasm. CARDIZEM has been shown effective in the treatment of spontaneous coronary artery spasm presenting as Prinzmetal's variant angina (resting angina with ST-segment elevation occurring during attacks).
2. **Chronic Stable Angina (Classic Effort-Associated Angina).** CARDIZEM is indicated in the management of chronic stable angina. CARDIZEM has been effective in controlled trials in reducing angina frequency and increasing exercise tolerance.

There are no controlled studies of the effectiveness of the concomitant use of diltiazem and beta-blockers or of the safety of this combination in patients with impaired ventricular function or conduction abnormalities.

CONTRAINDICATIONS

CARDIZEM is contraindicated in (1) patients with sick sinus syndrome except in the presence of a functioning ventricular pacemaker, (2) patients with second- or third-degree AV block except in the presence of a functioning ventricular pacemaker, and (3) patients with hypotension (less than 90 mm Hg systolic).

WARNINGS

1. **Cardiac Conduction.** CARDIZEM prolongs AV node refractory periods without significantly prolonging sinus node recovery time, except in patients with sick sinus syndrome. This effect may rarely result in abnormally slow heart rates (particularly in patients with sick sinus syndrome) or second- or third-degree AV block (six of 1243 patients for 0.48%). Concomitant use of diltiazem with beta-blockers or digitalis may result in additive effects on cardiac conduction. A patient with Prinzmetal's angina developed periods of asystole (2 to 5 seconds) after a single dose of 60 mg of diltiazem.
2. **Congestive Heart Failure.** Although diltiazem has a negative inotropic effect in isolated animal tissue preparations, hemodynamic studies in humans with normal ventricular function have not shown a reduction in cardiac index nor consistent negative effects on contractility (dp/dt). Experience with the use of CARDIZEM alone or in combination with beta-blockers in patients with impaired ventricular function is very limited. Caution should be exercised when using the drug in such patients.
3. **Hypotension.** Decreases in blood pressure associated with CARDIZEM therapy may occasionally result in symptomatic hypotension.
4. **Acute Hepatic Injury.** In rare instances, patients receiving CARDIZEM have exhibited reversible acute hepatic injury as evidenced by moderate to extreme elevations of liver enzymes. (See PRECAUTIONS and ADVERSE REACTIONS.)

PRECAUTIONS

General. CARDIZEM (diltiazem hydrochloride) is extensively metabolized by the liver and excreted by the kidneys and in bile. As with any new drug given over prolonged periods, laboratory parameters should be monitored at regular intervals. The drug should be used with caution in patients with impaired renal or hepatic function. In subacute and chronic dog and rat studies designed to produce toxicity, high doses of diltiazem were associated with hepatic damage. In special subacute hepatic studies, oral doses of 125 mg/kg and higher in rats were associated with histological changes in the liver which were reversible when the drug was discontinued. In dogs, doses of 20 mg/kg were also associated with hepatic changes; however, these changes were reversible with continued dosing.

Drug Interaction. Pharmacologic studies indicate that there may be additive effects in prolonging AV conduction when using beta-blockers or digitalis concomitantly with CARDIZEM. (See WARNINGS).

Controlled and uncontrolled domestic studies suggest that concomitant use of CARDIZEM and beta-blockers or digitalis is usually well tolerated. Available data are not sufficient, however, to predict the effects of concomitant treatment, particularly in patients with left ventricular dysfunction or cardiac conduction abnormalities. In healthy volunteers, diltiazem has been shown to increase serum digoxin levels up to 20%.

Carcinogenesis, Mutagenesis, Impairment of Fertility. A 24-month study in rats and a 21-month study in mice showed no evidence of carcinogenicity. There was also no mutagenic response in in vitro bacterial tests. No intrinsic effect on fertility was observed in rats.

Pregnancy. Category C. Reproduction studies have been conducted in mice, rats, and rabbits. Administration of doses ranging from five to ten times greater (on a mg/kg basis) than the daily recommended therapeutic dose has resulted in embryo and fetal lethality. These doses, in some studies, have been reported to cause skeletal abnormalities. In the perinatal/postnatal studies, there was some reduction in early individual pup weights and survival rates. There was an increased incidence of stillbirths at doses of 20 times the human dose or greater.

There are no well-controlled studies in pregnant women; therefore, use CARDIZEM in pregnant women only if the potential benefit justifies the potential risk to the fetus.

Nursing Mothers. It is not known whether this drug is excreted in human milk. Because many drugs are excreted in human milk, exercise caution when CARDIZEM is administered to a nursing woman if the drug's benefits are thought to outweigh its potential risks in this situation.

Pediatric Use. Safety and effectiveness in children have not been established.

ADVERSE REACTIONS

Serious adverse reactions have been rare in studies carried out to date, but it should be recognized that patients with impaired ventricular function and cardiac conduction abnormalities have usually been excluded.

In domestic placebo-controlled trials, the incidence of adverse reactions reported during CARDIZEM therapy was not greater than that reported during placebo therapy.

The following represent occurrences observed in clinical studies which can be at least reasonably associated with the pharmacology of calcium influx inhibition. In many cases, the relationship to CARDIZEM has not been established. The most common occurrences, as well as their frequency of presentation, are: edema (2.4%), headache (2.1%), nausea (1.9%), dizziness (1.5%), rash (1.3 asthenia (1.2%), AV block (1.1%). In addition, the following eve were reported infrequently (less than 1%) with the order of prese tion corresponding to the relative frequency of occurrence.

Cardiovascular:	Flushing, arrhythmia, hypotension, brady dia, palpitations, congestive heart fail syncope.
Nervous System:	Paresthesia, nervousness, somnolen tremor, insomnia, hallucinations, and amne
Gastrointestinal:	Constipation, dyspepsia, diarrhea, vomit mild elevations of alkaline phosphatase, SG SGPT, and LDH.
Dermatologic:	Pruritus, petechiae, urticaria, photosensiti
Other:	Polyuria, nocturia.

The following additional experiences have been noted:

A patient with Prinzmetal's angina experiencing episode vasospastic angina developed periods of transient asymptom asystole approximately five hours after receiving a single 60 dose of CARDIZEM.

The following postmarketing events have been reported in quently in patients receiving CARDIZEM: erythema multiforme; kopenia; and extreme elevations of alkaline phosphatase, SG SGPT, LDH, and CPK. However, a definitive cause and effect betv these events and CARDIZEM therapy is yet to be established.

OVERDOSAGE OR EXAGGERATED RESPONSE

Overdosage experience with oral diltiazem has been lim Single oral doses of 300 mg of CARDIZEM have been well toler by healthy volunteers. In the event of overdosage or exagger response, appropriate supportive measures should be employe addition to gastric lavage. The following measures may be consid

Bradycardia	Administer atropine (0.60 to 1.0 mg). If t is no response to vagal blockade, admin isoproterenol cautiously.
High-Degree AV Block	Treat as for bradycardia above. Fixed l degree AV block should be treated with diac pacing.
Cardiac Failure	Administer inotropic agents (isoproter dopamine, or dobutamine) and diuretics.
Hypotension	Vasopressors (eg, dopamine or levarte bitartrate).

Actual treatment and dosage should depend on the severity c clinical situation and the judgment and experience of the tre physician.

The oral/LD_{50}'s in mice and rats range from 415 to 740 m and from 560 to 810 mg/kg, respectively. The intravenous LD_5 these species were 60 and 38 mg/kg, respectively. The oral LL dogs is considered to be in excess of 50 mg/kg, while lethality seen in monkeys at 360 mg/kg. The toxic dose in man is not kn but blood levels in excess of 800 ng/ml have not been assoc with toxicity.

DOSAGE AND ADMINISTRATION

Exertional Angina Pectoris Due to Atherosclerotic C nary Artery Disease or Angina Pectoris at Rest Due to C nary Artery Spasm. Dosage must be adjusted to each pati needs. Starting with 30 mg four times daily, before meals a bedtime, dosage should be increased gradually (given in di doses three or four times daily) at one- to two-day intervals optimum response is obtained. Although individual patients respond to any dosage level, the average optimum dosage appears to be 180 to 240 mg/day. There are no available data co ing dosage requirements in patients with impaired renal or he function. If the drug must be used in such patients, titration sho carried out with particular caution.

Concomitant Use With Other Antianginal Agents:

1. **Sublingual NTG** may be taken as required to abort anginal attacks during CARDIZEM therapy.
2. **Prophylactic Nitrate Therapy**—CARDIZEM may be coadministered with short- and long-acting nitrates, but have been no controlled studies to evaluate the antia effectiveness of this combination.
3. **Beta-blockers.** (See WARNINGS and PRECAUTIONS.)

HOW SUPPLIED

Cardizem 30-mg tablets are supplied in bottles of 100 0088-1771-47) and in Unit Dose Identification Paks of 100 0088-1771-49). Each green tablet is engraved with MARION c side and 1771 engraved on the other. CARDIZEM 60-mg s tablets are supplied in bottles of 100 (NDC 0088-1772-47) and Dose Identification Paks of 100 (NDC 0088-1772-49). Each tablet is engraved with MARION on one side and 1772 on the

Issued 4

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Allergy; Immunological and Clinical Aspects; Atlas of Head and Neck Surgery; Current Medical Diagnosis & Treatment

Allergy: Immunological and Clinical Aspects

M.H. Lessof (ed). New York, NY, John Wiley & Sons, 1984. Pp. 474. Illustrated.

Allergy: Immunological and Clinical Aspects is a new textbook edited by M.H. Lessof, professor of medicine at Guy's Hospital Medical School, London. Its contributors are prominent British allergists and pulmonary specialists; the book reflects the attitude of the British physicians towards the field of allergy and clinical immunology. Twenty years ago, there may have been a dichotomy in the methods of treatment; but as one can see from this text, there now is a unanimity of opinion on both sides of the Atlantic.

The strongest chapters in the book are those that deal with food testing and diagnostic challenges as well as allergy in infancy and childhood. There is an excellent review on milk allergy in chapter 6. The discussion of childhood asthma by Price in this chapter is an excellent review and superior to anything in American literature. The second chapter on mediators of allergy is well written and the illustrations are extremely helpful in explaining the complicated pathophysiology of these reactions.

Unfortunately, the latter chapters on gastrointestinal reactions, food intolerance, and skin allergy are not as complete or well written as the earlier chapters in this text.

In summary, I think this book is an excellent review for the allergist or the sophisticated internist or pediatrician who wishes to expand his knowledge on the subject. It is not as complete a reference as Middleton's *Allergy Principles and Practice*, but still is a worthwhile addition to the medical literature.

Donald G. McKaba, M.D.

The Atlas of Head and Neck Surgery

Bruce W. Jafek, M.D., and Clarence T. Sasaki, M.D., (eds). New York, NY, Grune & Stratton, 1983. Pp. 570. Illustrated. ($99)

This atlas is a comprehensive study covering almost all head and neck procedures currently being performed.

The strong point of the atlas at the same time becomes its weakness. Its primary asset is coverage of practically every procedure. However, it should be noted that many of the procedures are incompletely illustrated. Some of the more extensive procedures require more illustration to explain fully the procedure. For example, the chapter concerning submucous resection (SMR) is incomplete in that it does not show the Cottle techniques which, at times, are necessary for successful nasal surgery.

Overall, the book is very complete and if one can identify with the schematic drawings, a large measure of help can be obtained when performing these procedures.

Harold Arlen, M.D.

Current Medical Diagnosis & Treatment, 1985

Krupp, Chatton, and Werdegar (eds). Los Altos, CA, Lange Medical Publications, 1985. Pp. 1157. ($27.50)

This text has been revised since its last publication in 1983. Prior editions have been well received by the health practitioners as an excellent and complete desk reference.

Significant changes and innovations in this edition include the following:

- Medical references extensively updated throughout the book; most references begin in 1980 and go through mid-1984.
- New and approved drugs of 1983 and 1984. Recommendations for dosage modifications and proper clinical application of older drugs are given.
- Application of some of the newest radiologic diagnostic techniques, including magnetic resonance imaging.
- Necessity for early recognition and immediate treatment of airway obstruction and sepsis in acute epiglottitis emphasized.
- New oral diuretic drugs introduced in 1983 and 1984.
- Tamoxifen replaces traditional diethylstilbestrol as the initial therapy of choice in metastatic breast cancer.
- Gynecologic and obstetric disorders extensively rewritten by new chapter authors.
- Prompt immobilization of long-bone fractures and early detection emphasized for improving prognosis of life-threatening fat embolization syndrome.
- Nervous system disorders, including movement disorders, the epilepsies, and stroke, completely rewritten by a new author.
- Mechanisms of action of immunosuppressive drugs discussed.
- Consideration of pituitary hormone-releasing factors in endocrine disease.
- New information of human leukocyte antigen in disease.
- Up-to-date review of alteration of chromosomes in cancer and leukemia.
- Recommendations for use of newer antibiotic agents.
- New recommendations for vaccination and prevention of communicable diseases.
- New agents for treatment of parasitic diseases.
- Update on AIDS.

This reviewer highly recommends that this edition be purchased to replace the 1983 edition. It is intended to serve physicians, nurses, and students as a useful desk reference for diagnosis and treatment, and it fulfills its purpose very well.

Harry M. Poppick, M.D.

OBITUARIES

Drs. Achar; Brodkin; Commini; Coombs; D'Angelo; Hurst; Kosterlitz; Krohn; Longley; Peckman; Solomon; Strauss; and Talty

Dr. B.G. Achar

The former chief of surgery at Englewood Hospital, Balekudru G. Achar, M.D., died on March 1, 1985. A native of India, born in 1921, Dr. Achar received his medical education at Calcutta National Medical Institute and was graduated in 1949. He came to the United States in 1951, practicing first in New York City and then Pennsylvania. In 1964 he became a member of our Bergen County component, and was board certified in general and thoracic surgery. Dr. Achar was a Fellow of the American College of Surgeons, and of the American College of Chest Physicians. He had been affiliated with Bergen Pines County Hospital, Paramus; Pascack Valley Hospital, Westwood; and Englewood Hospital. Dr. Achar had affiliations with Veterans Administration facilities in Erie, Pennsylvania; Wadsworth, Kansas; and Philadelphia, Pennsylvania, where he initiated an open-heart surgery program.

Dr. Henry A. Brodkin

We just have learned of the death, at Saint Barnabas Medical Center, Livingston, of Henry Andrew Brodkin, M.D., a retired thoracic surgeon. A native of Russia, born in 1901, Dr. Brodkin and his family emigrated to the United States in his youth; he received his medical degree from Jefferson Medical College, Philadelphia, in 1924. He became a member of our Essex County component, and established an office in Newark, later moving to East Orange. Dr. Brodkin was a member of the American Medical Association, and was a Fellow of the American College of Surgeons, of the International College of Surgeons, and of the American College of Chest Physicians. Prior to his retirement in the mid-1970s, Dr. Brodkin had been affiliated with Irvington General Hospital; the Veterans Administration; Martland (now University Hospital), Newark; the Eye and Ear Infirmary, Newark; and Newark Beth Israel Medical Center. He is survived by his wife, Eva Topkins Brodkin, M.D., a retired dermatologist and member of MSNJ. Dr. Brodkin was a recipient of MSNJ's Golden Merit Award in 1974, in recognition of his 50 years in medicine.

Dr. Frank F. Commini

Frank Ferrer Commini, M.D., an internist with special interest in problems of nutrition and obesity, who had offices in Hamilton Square, died on March 1, 1985, at St. Francis Medical Center, Trenton. A native of Trenton, born in 1911, Dr. Commini received his medical degree from Georgetown University School of Medicine in 1937. He was a member of our Mercer County component, and of the American Medical Association. He had been affiliated with Helene Fuld Medical Center and St. Francis Medical Center.

Dr. James N. Coombs

We just have learned of the death of James Norman Coombs, M.D., a general surgeon for many years in Ocean City. Dr. Coombs was 88 years old at the time of his death and had been retired from active practice since the early 1970s. A native of New Jersey, Dr. Coombs had received his medical degree from the Medico-Chirurgical College of Philadelphia in 1916. He was a member of our Cape May County component, and a member of the American Medical Association. Dr. Coombs was board certified in his specialty. In 1966 he was a recipient of MSNJ's Golden Merit Award to honor his 50 years in medicine.

Dr. William A. D'Angelo

We just have learned of the death of William Anthony D'Angelo, M.D., after a long and complicated illness, at the untimely age of 54. A native of New York City, Dr. D'Angelo received his medical education at the University of Bologna, Italy, from which he was graduated in 1957. Dr. D'Angelo, an internist with emphasis on family medicine, practiced his specialty first in Pennsylvania, then in New York State, and became a member of our Hudson County component in 1980. He was a Fellow of the American and International Colleges of Physicians, and at the time of his death had been director of medical education at Riverside General Hospital, Secaucus.

Dr. John Hurst

At the untimely age of 61, John Hurst, M.D., a member of our Atlantic County component, died on December 23, 1984, at Atlantic City Medical Center. Born in Washington, D.C., Dr. Hurst received his medical degree from Howard University School of Medicine in that city in 1953. For over ten years he was affiliated with Chester Hospital and Sacred Heart Hospital, both in Chester, Pennsylvania; in 1969 he joined the staff at Atlantic City Medical Center as an emergency room physician. In the early 1970s, illness forced Dr. Hurst to retire.

Dr. Henry H. Kosterlitz

Born at the turn of the century, Henry Hans Kosterlitz, M.D., an internist in Irvington prior to his retirement in 1971, died on February 20, 1985. A native of Germany, Dr. Kosterlitz received his medical degree from Breslau University, Prussia, in 1923. Dr. Kosterlitz was a member of our Essex County component, and had been affiliated with the Veterans Administration Medical Center, Lyons; Irvington General Hospital; and Beth Israel Hospital, Passaic.

Dr. Marc Krohn

Marc Krohn, M.D., died on March 2, 1985, at Riverview Medical Center, Red Bank, at the venerable age of 82. Born in Kiev, Russia, Dr. Krohn and his family emigrated to the United States; he received his medical training at New York Medical College, and was graduated in 1929. He practiced general medicine in the Belford section of Middletown Township for over 50 years. Dr. Krohn was active in community service: he served for 30 years as physician for the township, the police department, and the school system. He was secretary of the local board of health, and was a consultant to the Hazlet board of health. Dr. Krohn was a member of our Monmouth County component, and a member of the American Medical Association. In 1979, the Medical Society of New Jersey bestowed on Dr. Krohn its Golden Merit Award in recognition of his 50 years in medicine.

Dr. S. Brooks Longley

A general surgeon in South Orange for many years, S. Brooks Longley, M.D., died on February 3, 1985, at the Hospital Center at Orange. Born in Hartford, Connecticut, in 1921, Dr. Longley was graduated from the medical school at the University of Virginia in 1945. He had been a member of our Essex County component, and also of the American Medical Association. Dr. Longley was a Diplomate in surgery and had been affiliated with Orange Memorial Hospital, where he had been chairman of the department of surgery for ten years. He also had served as a consultant to the Children's Aid and Adoption Society and as medical adviser to the Central Registry for Nurses in New Jersey.

Dr. Albert A. Peckman

On January 4, 1985, Albert Abram Peckman, M.D., a member of our Hudson County component, died in Saint Michael's Medical Center, Newark, of an acute myocardial infarction. Born in 1912, in Jersey City, Dr. Peckman received his medical degree from Dalhousie University Faculty of Medicine, Nova Scotia, Canada, in 1939. He established a practice in thoracic surgery in his native city, and had been affiliated with St. Francis Community Health Center, Christ Hospital, and the Medical Center, all in Jersey City, and also with Roosevelt Hospital, Edison. Dr. Peckman was a Fellow of the American College of Chest Physicians, and of the International College of Surgeons.

Dr. Louis Solomon

A Jersey City anesthesiologist, Louis Solomon, M.D., died on January 15, 1985, at Christ Hospital in that city. Born in 1914, in New York City, Dr. Solomon received his medical degree from the Faculty of Medicine of the University of Lausanne, Switzerland, in 1937. He became a member of our Hudson County component, and had been affiliated with B.S. Pollak Hospital, Christ Hospital, and Jewish Hospital and Rehabilitation Center of New Jersey, all in Jersey City. Dr. Pollak was a Fellow of the International College of Surgeons.

Dr. Arthur Strauss

A retired otorhinolaryngologist, Arthur Strauss, M.D., died at Monmouth Medical Center, Long Branch, on February 22, 1985, at the venerable age of 86. A citizen of the United States, born in Germany, Dr. Strauss received his medical degree from the University at Wuerzburg, Germany, in 1922. He had been on the staff at Monmouth Medical Center for 60 years prior to his retirement in 1984. Dr. Strauss was a member of our Monmouth County component, a member of the American Medical Association, and was board certified in his specialty. In 1972, Dr. Strauss was a recipient of MSNJ's Golden Merit Award in recognition of his 50 years as a physician.

Dr. John C. Talty

John Carey Talty, M.D., an ophthalmologist in Hoboken for 44 years prior to his retirement in 1968, died at his home in Spring Lake on March 4, 1985. A native of Providence, Rhode Island, born in 1896, Dr. Talty earned his medical degree at the College of Physicians and Surgeons at Columbia University, New York, in 1924. Dr. Talty was a member of our Hudson County component, and a member of the American Medical Association. He had been on the staff and was a past president of St. Mary's Hospital, Hoboken; he also was affiliated with New York Eye Infirmary, New York City. Dr. Talty had served as deputy medical examiner for Hudson County. He was a Fellow of the American and International Colleges of Surgeons. In 1974, the Medical Society of New Jersey bestowed on Dr. Talty the Golden Merit Award honoring his 50 years of medical service to his community.

Style Sheet

The Journal is the official organ of the Medical Society of New Jersey. The goals of* The Journal *are educational and informational. All material published in* The Journal *is copyrighted by MSNJ.

CONTENT

The educational content of each issue appears as scientific articles, based on research, original concepts relative to epidemiology of disease, and treatment methodology; case reports based on unusual clinical experiences; review articles; clinical notes, succinct items on some aspect or new observation or technique of a case experience; and special articles, which include evaluations, policy and position papers, and reviews of nonscientific subjects. Other topics include commentary (critical narration); medical history; therapeutic drug information; pediatric briefs; nutrition update; and an opinion column. Editorials are prepared by the Editor and by guest contributors on timely and relevant subjects; editorials are the responsibility of the author. The Doctors' Notebook section contains organizational, informational, and administrative items from MSNJ and from the community. Letters to the Editor and book reviews are welcome and will be published as space permits. The principal aim in the preparation of a contribution should be relevance to diagnosis and treatment and to education of patients and professionals. Preference will be given to professional authors from New Jersey and to out-of-state lecturers who submit a suitable manuscript based on a presentation made in New Jersey.

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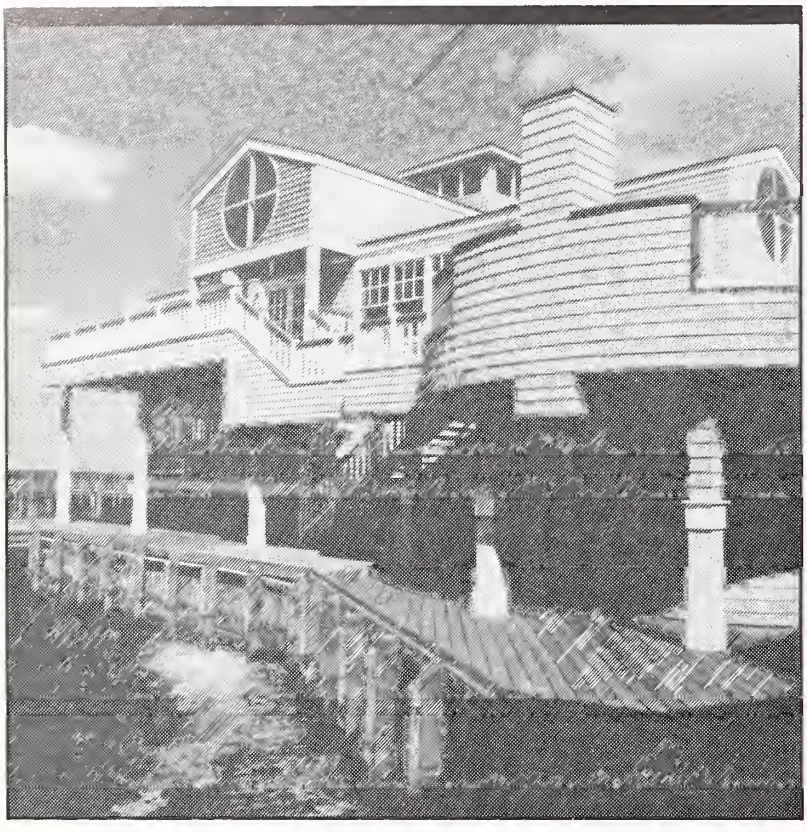
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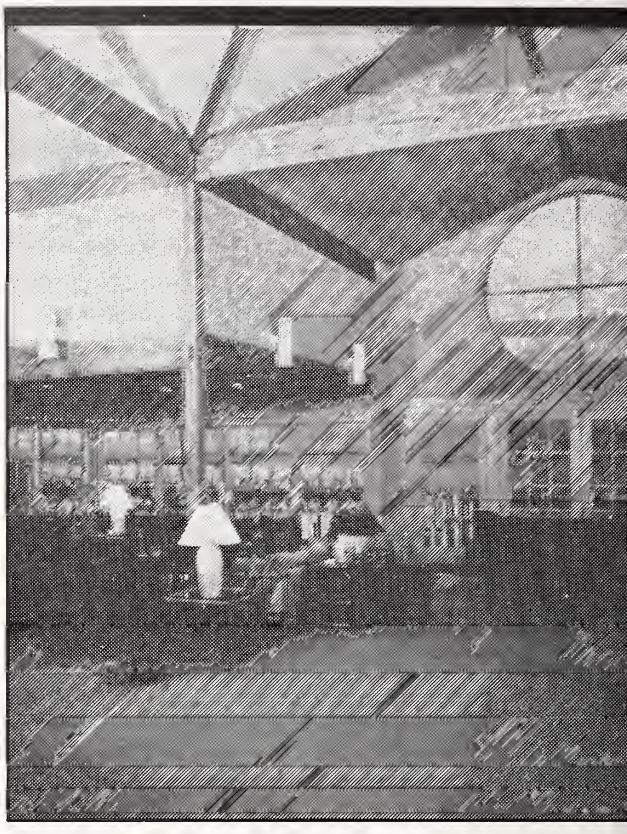
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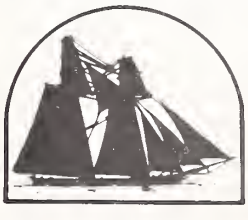
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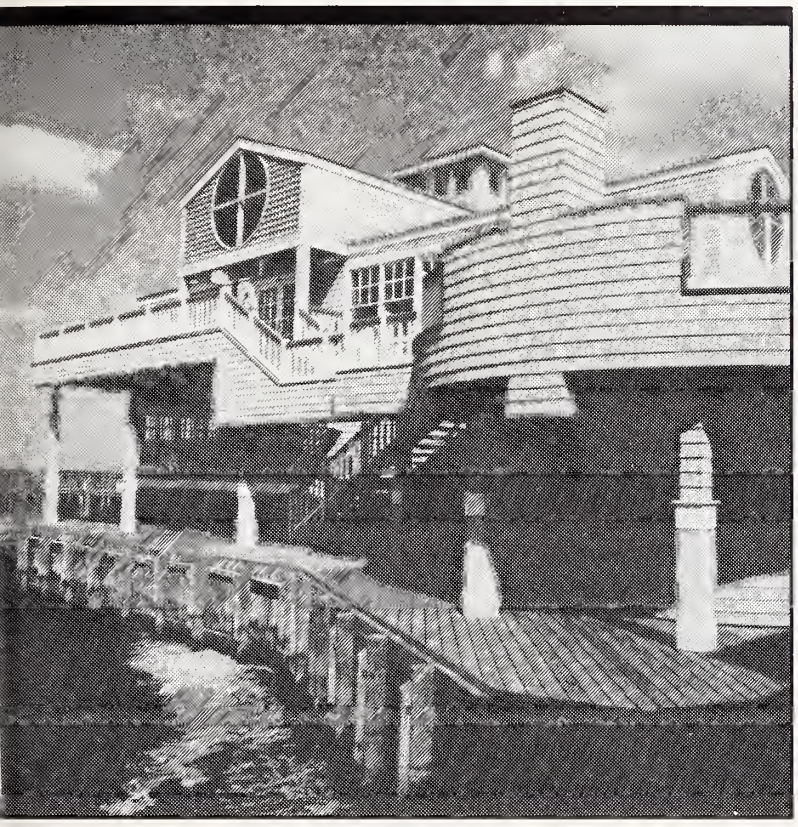
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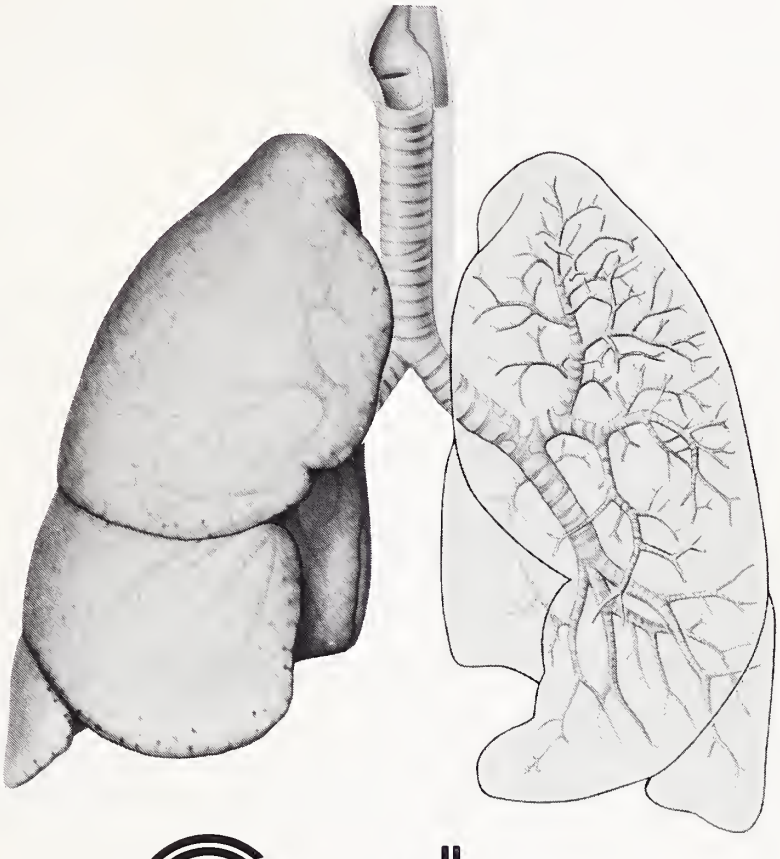
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Paul J. Hirsch, M.D.
Monroe S. Karetzky, M.D.
Avrum L. Katcher, M.D.
Stanley C. Leonberg, Jr., M.D.
Joel D. Levinson, M.D.
Joseph A. Lieberman, III, M.D.
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Stephen F. Wang, M.D.
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Consider the causative organisms...



Ceclor®
cefaclor
250-mg Pulvules® t.i.d.

offers effectiveness against the major causes of bacterial bronchitis

H. influenzae, *H. influenzae*, *S. pneumoniae*, *S. pyogenes*
(ampicillin-susceptible) (ampicillin-resistant)

ef Summary. Consult the package literature for prescribing ormation.

ications and Usage: Ceclor* (cefaclor, Lilly) is indicated in the atment of the following infections when caused by susceptible ains of the designated microorganisms:
Lower respiratory infections, including pneumonia caused by eptococcus pneumoniae (Diplococcus pneumoniae), Haemoph- s influenzae, and S. pyogenes (group A beta-hemolytic eptococci)
Appropriate culture and susceptibility studies should be formed to determine susceptibility of the causative organism Ceclor

ntraindication: Ceclor is contraindicated in patients with known ergy to the cephalosporin group of antibiotics.

rnings: IN PENICILLIN-SENSITIVE PATIENTS, CEPHALO- ORIN ANTIBIOTICS SHOULD BE ADMINISTERED CAUTIOUSLY. ERE IS CLINICAL AND LABORATORY EVIDENCE OF PARTIAL OSS-ALLERGENICITY OF THE PENICILLINS AND THE PHALOSPORINS, AND THERE ARE INSTANCES IN WHICH TIENTS HAVE HAD REACTIONS, INCLUDING ANAPHYLAXIS, BOTH DRUG CLASSES
Antibiotics, including Ceclor, should be administered cautiously any patient who has demonstrated some form of allergy, ticularly to drugs.
Pseudomembranous colitis has been reported with virtually all ad-spectrum antibiotics (including macrolides, semisynthetic icillins, and cephalosporins); therefore, it is important to nsider its diagnosis in patients who develop diarrhea in sociation with the use of antibiotics. Such colitis may range in verity from mild to life-threatening.
Treatment with broad-spectrum antibiotics alters the normal ra of the colon and may permit overgrowth of clostridia. Studies dicate that a toxin produced by *Clostridium difficile* is one mary cause of antibiotic-associated colitis.
Mild cases of pseudomembranous colitis usually respond to g discontinuance alone. In moderate to severe cases, management should include sigmoidoscopy, appropriate bacteriologic studies, and fluid, electrolyte, and protein supplementation. When the colitis does not improve after the drug has been discontinued, or when it is severe, oral vancomycin is the drug of choice for antibiotic-associated pseudomembranous colitis produced by *C. difficile*. Other causes of colitis should be ruled out.

Precautions: *General Precautions* — If an allergic reaction to Ceclor* (cefaclor, Lilly) occurs, the drug should be discontinued, and, if necessary, the patient should be treated with appropriate agents, e.g., pressor amines, antihistamines, or corticosteroids.
Prolonged use of Ceclor may result in the overgrowth of nonsusceptible organisms. Careful observation of the patient is essential. If superinfection occurs during therapy, appropriate measures should be taken.
Positive direct Coombs' tests have been reported during treatment with the cephalosporin antibiotics. In hematologic studies or in transfusion cross-matching procedures when antiglobulin tests are performed on the minor side or in Coombs' testing of newborns whose mothers have received cephalosporin antibiotics before parturition, it should be recognized that a positive Coombs' test may be due to the drug.
Ceclor should be administered with caution in the presence of markedly impaired renal function. Under such conditions, careful clinical observation and laboratory studies should be made because safe dosage may be lower than that usually recommended.
As a result of administration of Ceclor, a false-positive reaction for glucose in the urine may occur. This has been observed with Benedict's and Fehling's solutions and also with Clinitest® tablets but not with Tes-Tape® (Glucose Enzymatic Test Strip, USP, Lilly).
Broad-spectrum antibiotics should be prescribed with caution in individuals with a history of gastrointestinal disease, particularly colitis.
Usage in Pregnancy — Pregnancy Category B — Reproduction studies have been performed in mice and rats at doses up to 12 times the human dose and in ferrets given three times the maximum human dose and have revealed no evidence of impaired fertility or harm to the fetus due to Ceclor* (cefaclor, Lilly). There are, however, no adequate and well-controlled studies in pregnant women. Because animal reproduction studies are not always predictive of human response, this drug should be used during pregnancy only if clearly needed.
Nursing Mothers — Small amounts of Ceclor have been detected in mother's milk following administration of single 500-mg doses. Average levels were 0.18, 0.20, 0.21, and 0.16 mcg/ml at two, three, four, and five hours respectively. Trace amounts were detected at one hour. The effect on nursing infants is not known. Caution should be exercised when Ceclor is administered to a nursing woman.
Usage in Children — Safety and effectiveness of this product for use in infants less than one month of age have not been established.

Adverse Reactions: Adverse effects considered related to therapy with Ceclor are uncommon and are listed below.
Gastrointestinal symptoms occur in about 2.5 percent of patients and include diarrhea (1 in 70).
Symptoms of pseudomembranous colitis may appear either during or after antibiotic treatment. Nausea and vomiting have been reported rarely.
Hypersensitivity reactions have been reported in about 1.5 percent of patients and include morbilliform eruptions (1 in 100). Pruritus, urticaria, and positive Coombs' tests each occur in less than 1 in 200 patients. Cases of serum-sickness-like reactions (erythema multiforme or the above skin manifestations accompanied by arthritis/arthralgia and, frequently, fever) have been reported. These reactions are apparently due to hypersensitivity and have usually occurred during or following a second course of therapy with Ceclor. Such reactions have been reported more frequently in children than in adults. Signs and symptoms usually occur a few days after initiation of therapy and subside within a few days after cessation of therapy. No serious sequelae have been reported. Antihistamines and corticosteroids appear to enhance resolution of the syndrome.
Cases of anaphylaxis have been reported, half of which have occurred in patients with a history of penicillin allergy.
Other effects considered related to therapy included eosinophilia (1 in 50 patients) and genital pruritus or vaginitis (less than 1 in 100 patients).
Causal Relationship Uncertain — Transitory abnormalities in clinical laboratory test results have been reported. Although they were of uncertain etiology, they are listed below to serve as alerting information for the physician.
Hepatic — Slight elevations in SGOT, SGPT, or alkaline phosphatase values (1 in 40).
Hematopoietic — Transient fluctuations in leukocyte count, predominantly lymphocytosis occurring in infants and young children (1 in 40).
Renal — Slight elevations in BUN or serum creatinine (less than 1 in 500) or abnormal urinalysis (less than 1 in 200).

[061782R]

Note. Ceclor* (cefaclor, Lilly) is contraindicated in patients with known allergy to the cephalosporins and should be given cautiously to penicillin-allergic patients.
Penicillin is the usual drug of choice in the treatment and prevention of streptococcal infections, including the prophylaxis of rheumatic fever. See prescribing information.

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Lilly

Additional information available to the profession on request from Eli Lilly and Company, Indianapolis, Indiana 46285

Eli Lilly Industries, Inc.
Carolina, Puerto Rico 00630

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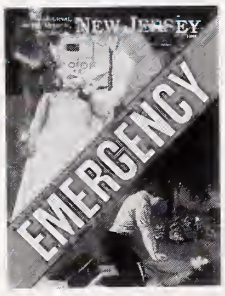
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SPECIAL SECTION

Tr1 1985 Transactions

On The Cover: A method of reviewing treatment in the hospital emergency room has been developed. Read the story beginning on page 523. Cover illustration by Frank Cecala.



Isn't it interesting that the health insurer with the most comprehensive coverage program in New Jersey also has the support of over 70% of the physicians in the state?

The program is P.A.C.E. The company, Blue Shield, the people who invented health care insurance.

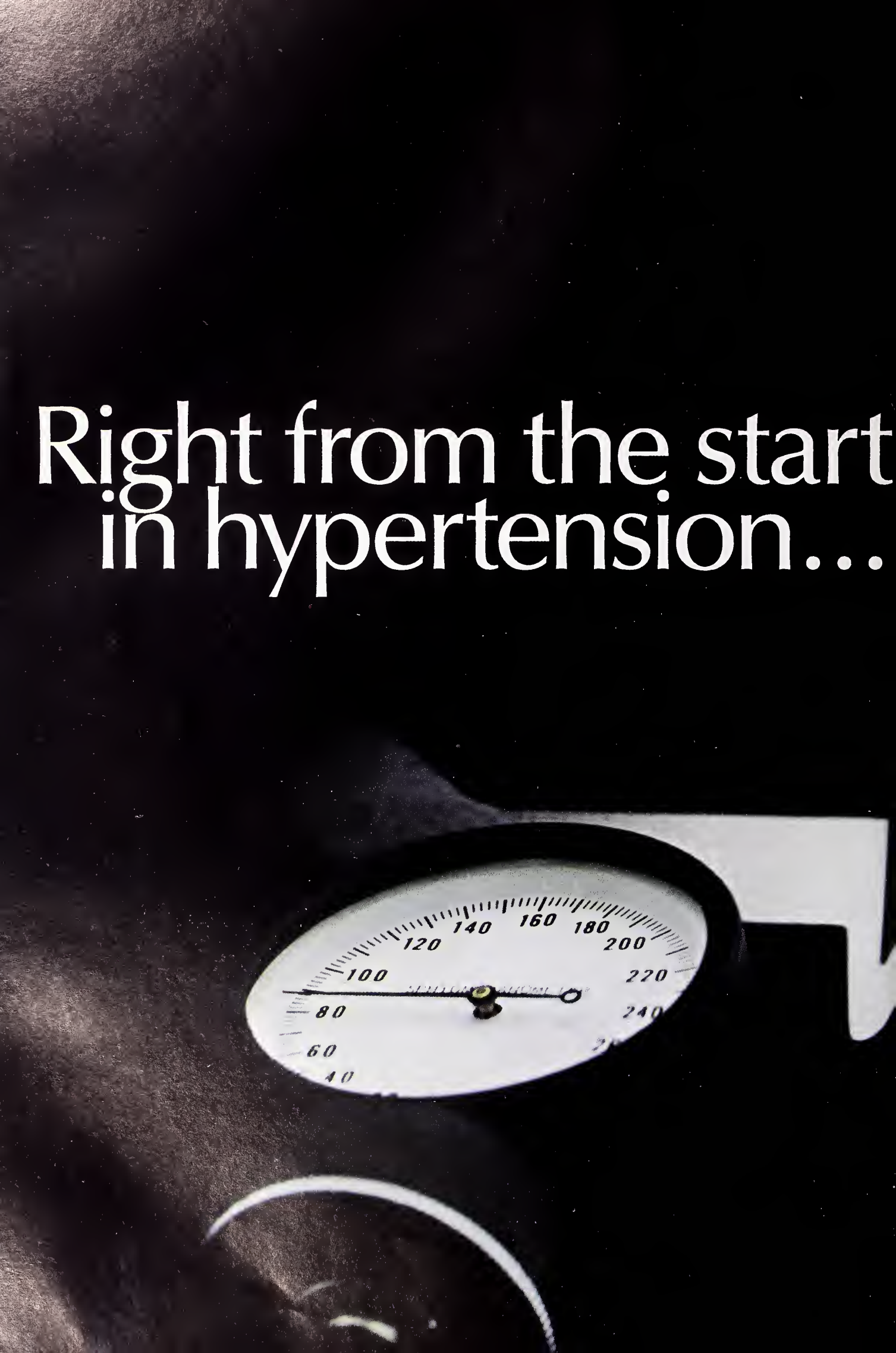
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CARRY THE CARING CARD℠



Blue Shield
of New Jersey

Right from the start in hypertension...



Once-daily INDERAL LA (propranolol HCl) for smooth blood pressure control without the potassium problems of diuretics

Once-daily INDERAL LA (propranolol HCl) avoids the risk of diuretic-induced ECG abnormalities due to hypokalemia.[1,2] In addition, INDERAL LA preserves potassium balance without additive agents or supplements while providing simple, well-tolerated therapy with broad cardiovascular benefits.

Once-daily INDERAL LA for the cardiovascular benefits of the world's leading beta blocker

Simply start with 80 mg once daily. Dosage may be increased to 120 mg to 160 mg once daily as needed to achieve additional control.

Like conventional INDERAL tablets, INDERAL LA should not be used in the presence of congestive heart failure, sinus bradycardia, heart block greater than first degree, and bronchial asthma.

For beta-1/beta-2 blockade

Once-daily

INDERAL® LA

(PROPRANOLOL HCl) LONG ACTING CAPSULES



80 mg 120 mg 160 mg

The appearance of these capsules is a registered trademark of Ayerst Laboratories

Please see brief summary of prescribing information on the next page for further details.

Once-daily
For beta-1/beta-2 blockade INDERAL® LA
(PROPRANOLOL HCl) LONG ACTING CAPSULES



The appearance of these capsules is a registered trademark of Ayerst Laboratories.

BRIEF SUMMARY *(FOR FULL PRESCRIBING INFORMATION, SEE PACKAGE CIRCULAR.)*
INDERAL® LA brand of propranolol hydrochloride **(Long Acting Capsules)**
DESCRIPTION. Inderal LA is formulated to provide a sustained release of propranolol hydrochloride. Inderal LA is available as 80 mg, 120 mg, and 160 mg capsules.
CLINICAL PHARMACOLOGY. INDERAL is a nonselective beta-adrenergic receptor blocking agent possessing no other autonomic nervous system activity. It specifically competes with beta-adrenergic receptor stimulating agents for available receptor sites. When access to beta-receptor sites is blocked by INDERAL, the chronotropic, inotropic, and vasodilator responses to beta-adrenergic stimulation are decreased proportionately.

INDERAL LA Capsules (80, 120, and 160 mg) release propranolol HCl at a controlled and predictable rate. Peak blood levels following dosing with INDERAL LA occur at about 6 hours and the apparent plasma half-life is about 10 hours. When measured at steady state over a 24-hour period the areas under the propranolol plasma concentration-time curve (AUCs) for the capsules are approximately 60% to 65% of the AUCs for a comparable divided daily dose of INDERAL tablets. The lower AUCs for the capsules are due to greater hepatic metabolism of propranolol, resulting from the slower rate of absorption of propranolol. Over a twenty-four (24) hour period, blood levels are fairly constant for about twelve (12) hours then decline exponentially.

INDERAL LA should not be considered a simple mg for mg substitute for conventional propranolol and the blood levels achieved do not match (are lower than) those of two to four times daily dosing with the same dose. When changing to INDERAL LA from conventional propranolol, a possible need for retitration upwards should be considered especially to maintain effectiveness at the end of the dosing interval. In most clinical settings, however, such as hypertension or angina where there is little correlation between plasma levels and clinical effect, INDERAL LA has been therapeutically equivalent to the same mg dose of conventional INDERAL as assessed by 24-hour effects on blood pressure and on 24-hour exercise responses of heart rate, systolic pressure and rate pressure product. INDERAL LA can provide effective beta blockade for a 24-hour period.

The mechanism of the antihypertensive effect of INDERAL has not been established. Among the factors that may be involved in contributing to the antihypertensive action are (1) decreased cardiac output, (2) inhibition of renin release by the kidneys, and (3) diminution of tonic sympathetic nerve outflow from vasomotor centers in the brain. Although total peripheral resistance may increase initially, it readjusts to or below the pretreatment level with chronic use. Effects on plasma volume appear to be minor and somewhat variable. INDERAL has been shown to cause a small increase in serum potassium concentration when used in the treatment of hypertensive patients.

In angina pectoris, propranolol generally reduces the oxygen requirement of the heart at any given level of effort by blocking the catecholamine-induced increases in the heart rate, systolic blood pressure, and the velocity and extent of myocardial contraction. Propranolol may increase oxygen requirements by increasing left ventricular fiber length, end diastolic pressure and systolic ejection period. The net physiologic effect of beta-adrenergic blockade is usually advantageous and is manifested during exercise by delayed onset of pain and increased work capacity.

In dosages greater than required for beta blockade, INDERAL also exerts a quinidine-like or anesthetic-like membrane action which affects the cardiac action potential. The significance of the membrane action in the treatment of arrhythmias is uncertain.

The mechanism of the antimigraine effect of propranolol has not been established. Beta-adrenergic receptors have been demonstrated in the pial vessels of the brain.

Beta receptor blockade can be useful in conditions in which, because of pathologic or functional changes, sympathetic activity is detrimental to the patient. But there are also situations in which sympathetic stimulation is vital. For example, in patients with severely damaged hearts, adequate ventricular function is maintained by virtue of sympathetic drive which should be preserved. In the presence of AV block, greater than first degree, beta blockade may prevent the necessary facilitating effect of sympathetic activity on conduction. Beta blockade results in bronchial constriction by interfering with adrenergic bronchodilator activity which should be preserved in patients subject to bronchospasm.

Propranolol is not significantly dialyzable.

INDICATIONS AND USAGE. Hypertension: INDERAL LA is indicated in the management of hypertension; it may be used alone or used in combination with other antihypertensive agents, particularly a thiazide diuretic. INDERAL LA is not indicated in the management of hypertensive emergencies.

Angina Pectoris Due to Coronary Atherosclerosis: INDERAL LA is indicated for the long-term management of patients with angina pectoris.

Migraine: INDERAL LA is indicated for the prophylaxis of common migraine headache. The efficacy of propranolol in the treatment of a migraine attack that has started has not been established and propranolol is not indicated for such use.

Hypertrophic Subaortic Stenosis: INDERAL LA is useful in the management of hypertrophic subaortic stenosis, especially for treatment of exertional or other stress-induced angina, palpitations, and syncope. INDERAL LA also improves exercise performance. The effectiveness of propranolol hydrochloride in this disease appears to be due to a reduction of the elevated outflow pressure gradient which is exacerbated by beta-receptor stimulation. Clinical improvement may be temporary.

CONTRAINDICATIONS. INDERAL is contraindicated in 1) cardiogenic shock, 2) sinus bradycardia and greater than first degree block; 3) bronchial asthma; 4) congestive heart failure (see WARNINGS) unless the failure is secondary to a tachyarrhythmia treatable with INDERAL.

WARNINGS. CARDIAC FAILURE: Sympathetic stimulation may be a vital component supporting circulatory function in patients with congestive heart failure, and its inhibition by beta blockade may precipitate more severe failure. Although beta blockers should be avoided in overt congestive heart failure, if necessary, they can be used with close follow-up in patients with a history of failure who are well compensated and are receiving digitalis and diuretics. Beta-adrenergic blocking agents do not abolish the inotropic action of digitalis on heart muscle.

IN PATIENTS WITHOUT A HISTORY OF HEART FAILURE, continued use of beta blockers can, in some cases, lead to cardiac failure. Therefore, at the first sign or symptom of heart failure, the patient should be digitalized and/or treated with diuretics, and the response observed closely, or INDERAL should be discontinued (gradually, if possible).

IN PATIENTS WITH ANGINA PECTORIS, there have been reports of exacerbation of angina and, in some cases, myocardial infarction, following abrupt discontinuance of INDERAL therapy. Therefore, when discontinuance of INDERAL is planned the dosage should be gradually reduced over at least a few weeks, and the patient should be cautioned against interruption or cessation of therapy without the physician's advice. If INDERAL therapy is interrupted and exacerbation of angina occurs, it usually is advisable to reinstitute INDERAL therapy and take other measures appropriate for the management of unstable angina pectoris. Since coronary artery disease may be unrecognized, it may be prudent to follow the above advice in patients considered at risk of having occult atherosclerotic heart disease who are given propranolol for other indications.

Nonallergic Bronchospasm (e.g., chronic bronchitis, emphysema)— PATIENTS WITH BRONCHOSPASTIC DISEASES SHOULD IN GENERAL NOT RECEIVE BETA BLOCKERS. INDERAL should be administered with caution since it may block bronchodilation produced by endogenous and exogenous catecholamine stimulation of beta receptors.

MAJOR SURGERY: The necessity or desirability of withdrawal of beta-blocking therapy prior to major surgery is controversial. It should be noted, however, that the impaired ability of the heart to respond to reflex adrenergic stimuli may augment the risks of general anesthesia and surgical procedures.

INDERAL (propranolol HCl), like other beta blockers, is a competitive inhibitor of beta receptor agonists and its effects can be reversed by administration of such agents, e.g. dobutamine or isoproterenol. However, such patients may be subject to protracted severe hypotension. Difficulty in starting and maintaining the heartbeat has also been reported with beta blockers.

DIABETES AND HYPOGLYCEMIA: Beta-adrenergic blockade may prevent the appearance of certain premonitory signs and symptoms (pulse rate and pressure changes) of acute hypoglycemia in labile insulin-dependent diabetes. In these patients, it may be more difficult to adjust the dosage of insulin.

THYROTOXICOSIS: Beta blockade may mask certain clinical signs of hyperthyroidism. Therefore, abrupt withdrawal of propranolol may be followed by an exacerbation of symptoms of hyperthyroidism, including thyroid storm. Propranolol does not distort thyroid function tests.

IN PATIENTS WITH WOLFF-PARKINSON-WHITE SYNDROME, several cases have been reported in which, after propranolol, the tachycardia was replaced by a severe bradycardia requiring a demand pacemaker. In one case this resulted after an initial dose of 5 mg propranolol.

PRECAUTIONS. *General:* Propranolol should be used with caution in patients with impaired hepatic or renal function. INDERAL (propranolol HCl) is not indicated for the treatment of hypertensive emergencies.

Beta adrenoreceptor blockade can cause reduction of intraocular pressure. Patients should be told that INDERAL may interfere with the glaucoma screening test. Withdrawal may lead to a return of increased intraocular pressure.

Clinical Laboratory Tests: Elevated blood urea levels in patients with severe heart disease, elevated serum transaminase, alkaline phosphatase, lactate dehydrogenase.

DRUG INTERACTIONS: Patients receiving catecholamine-depleting drugs such as reserpine should be closely observed if INDERAL is administered. The added catecholamine-blocking action may produce an excessive reduction of resting sympathetic nervous activity which may result in hypotension, marked bradycardia, vertigo, syncopal attacks, or orthostatic hypotension.

Carcinogenesis, Mutagenesis, Impairment of Fertility: Long-term studies in animals have been conducted to evaluate toxic effects and carcinogenic potential. In 18-month studies in both rats and mice, employing doses up to 150 mg/kg/day, there was no evidence of significant drug-induced toxicity. There were no drug-related tumorigenic effects at any of the dosage levels. Reproductive studies in animals did not show any impairment of fertility that was attributable to the drug.

Pregnancy: Pregnancy Category C. INDERAL has been shown to be embryotoxic in animal studies at doses about 10 times greater than the maximum recommended human dose.

There are no adequate and well-controlled studies in pregnant women. INDERAL should be used during pregnancy only if the potential benefit justifies the potential risk to the fetus.

Nursing Mothers: INDERAL is excreted in human milk. Caution should be exercised when INDERAL is administered to a nursing woman.

Pediatric Use: Safety and effectiveness in children have not been established.

ADVERSE REACTIONS. Most adverse effects have been mild and transient and have rarely required the withdrawal of therapy.

Cardiovascular: bradycardia; congestive heart failure; intensification of AV block; hypotension; paresthesia of hands; thrombocytopenic purpura; arterial insufficiency, usually of Raynaud type.

Central Nervous System: lightheadedness; mental depression manifested by insomnia, lassitude, weakness, fatigue; reversible mental depression progressing to catatonia; visual disturbances, hallucinations; an acute reversible syndrome characterized by disorientation of time and place, short-term memory loss, emotional lability, slightly clouded sensorium, and decreased performance on neuropsychometrics.

Gastrointestinal: nausea, vomiting, epigastric distress, abdominal cramping, diarrhea, constipation, mesenteric arterial thrombosis, ischemic colitis.

Allergic: pharyngitis and agranulocytosis, erythematous rash, fever combined with aching and sore throat, laryngospasm and respiratory distress.

Respiratory: bronchospasm.

Hematologic: agranulocytosis, nonthrombocytopenic purpura, thrombocytopenic purpura.

Auto-Immune: In extremely rare instances, systemic lupus erythematosus has been reported.

Miscellaneous: alopecia, LE-like reactions, psoriasiform rashes, dry eyes, male impotence, and Peyronie's disease have been reported rarely. Oculomucocutaneous reactions involving the skin, serous membranes and conjunctivae reported for a beta blocker (practolol) have not been associated with propranolol.

DOSAGE AND ADMINISTRATION. INDERAL LA provides propranolol hydrochloride in a sustained-release capsule for administration once daily. If patients are switched from INDERAL tablets to INDERAL LA capsules, care should be taken to assure that the desired therapeutic effect is maintained. INDERAL LA should not be considered a simple mg for mg substitute for INDERAL. INDERAL LA has different kinetics and produces lower blood levels. Retitration may be necessary, especially to maintain effectiveness at the end of the 24-hour dosing interval.

HYPERTENSION—*Dosage must be individualized.* The usual initial dosage is 80 mg INDERAL LA once daily, whether used alone or added to a diuretic. The dosage may be increased to 120 mg once daily or higher until adequate blood pressure control is achieved. The usual maintenance dosage is 120 to 160 mg once daily. In some instances a dosage of 240 mg may be required. The time needed for full hypertensive response to a given dosage is variable and may range from a few days to several weeks.

ANGINA PECTORIS—*Dosage must be individualized.* Starting with 80 mg INDERAL LA once daily, dosage should be gradually increased at three to seven day intervals until optimum response is obtained. Although individual patients may respond at any dosage level, the average optimum dosage appears to be 160 mg once daily. In angina pectoris, the value and safety of dosage exceeding 320 mg per day have not been established.

If treatment is to be discontinued, reduce dosage gradually over a period of a few weeks (see WARNINGS).

MIGRAINE—*Dosage must be individualized.* The initial oral dose is 80 mg INDERAL LA once daily. The usual effective dose range is 160-240 mg once daily. The dosage may be increased gradually to achieve optimum migraine prophylaxis. If a satisfactory response is not obtained within four to six weeks after reaching the maximum dose, INDERAL LA therapy should be discontinued. It may be advisable to withdraw the drug gradually over a period of several weeks.

HYPERTROPHIC SUBAORTIC STENOSIS—80-160 mg INDERAL LA once daily.

PEDIATRIC DOSAGE—At this time the data on the use of the drug in this age group are limited to permit adequate directions for use.

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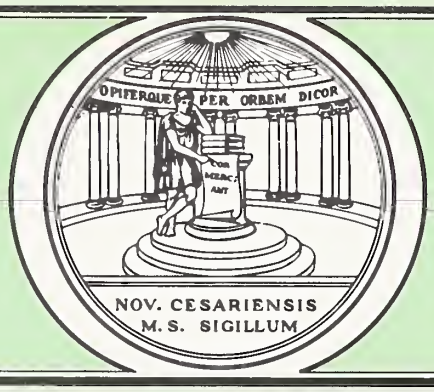
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MEMBERSHIP NEWSLETTER



MSNJ

THE MEDICAL SOCIETY OF NEW JERSEY VOLUME 24

PROVIDER REINSTATEMENT

The Division of Medical Assistance and Health Services is proposing to readopt the rules governing provider reinstatement which appear in the New Jersey Administrative Code at N.J.A.C. 10:49-7.1 et seq.

The purpose of the readoption is to comply with Executive Order No. 66 (1978), which requires state agencies to review their rules and renew them if they are effective. The Division plans to continue to utilize these rules because they enable providers who have been debarred, disqualified, or suspended from participating in the New Jersey Medicaid Program a chance to request reinstatement into the program.

A notice of the proposed readoption will appear in an issue of the *New Jersey Register*. However, there are no textual changes in the rule at this time.

PUBLIC OPINION SURVEY

There is growing interest and concern across the country about public perceptions of physicians and the changing nature of medical practice. This interest resulted in Substitute Resolution 2 and Board of Trustees Report OO which were adopted by the AMA's House of Delegates last December in Honolulu.

In response to the mandates contained in these House actions, the Association's Board of Trustees recently approved a wide-ranging plan (BOT Report RR, A-85) to inform the public of the many changes affecting medical care and the growing need for physicians to act as advocates for their patients.

The AMA will conduct surveys of public attitudes toward physicians in each of the 50 states. The survey is designed to measure the effectiveness of various projects included in the AMA's plan and aid in the planning and implementation of your own activities and programs. Telephone interviews will be conducted during July with 400 randomly selected adults in New Jersey.

POISONOUS PLANTS

When the subject is poisonous plants, poison ivy, poison oak, and poison sumac—and the intense skin irritation they produce in persons allergic to them—immediately come to mind. But there lurk in the house and garden many more common plants, grown for their beauty and fragrance, whose toxic properties are less known.

The *AMA Handbook of Poisonous and Injurious Plants* is a soft-covered, pocket-sized, 435-page book. It may be ordered for $18.95, plus $2.50 UPS delivery and handling charges, from Chicago Review Press, 213 West Institute Place, Chicago, IL 60610. It is also available at bookstores.

POSITIVE ASPECTS OF SAYING NO

We repeatedly are told the obvious truism that change is inevitable. However, every change needs to be evaluated as to its immediate, as well as long-range, impact for better or for worse.

Compromise and conciliation are a necessary part of any decision-making process, only so long as the issue under consideration is moral, ethical, and just.

To abandon one's principles through piecemeal concessions is nothing more than selling out on the installment plan.

Any compromise between good and evil is a loss for good and a victory for evil.

As community leaders, we physicians have an obligation to our patients and to ourselves to oppose those harmful changes which are being imposed upon us.

What good is progress and innovation, if we fail to preserve what is good and beneficial from the past?

An ounce of prevention is worth a pound of cure. Prevention is an almost totally negative approach, since it relies upon denying or avoiding those factors causative of harm.

After 6,000 and 200 years, respectively, the Ten Commandments and the Bill of Rights still stand as monumental proclamations. In both cases eight of the ten admonitions say no!

This country has lost two wars in the last 20 years, Vietnam and the war on poverty. Both had seemingly commendable motives, and dissenting opinions were considered as unpatriotic, inhumane, or reactionary.

Government now is waging an undeclared war on health care. Why not declare ourselves as conscientious objectors, and say, "Hell no, we won't go." (Frank J. Primich, M.D., May 3, 1985)

Commercial factors affecting your practice are undergoing rapid change. This essay will discuss these evolving elements.

1. *Capacity To Pay.* Most significant to all, there is a limiting of our national capacity to pay for the level of health care which the public has come to expect. The "entitlement" thinking of the 1960s, has shifted to the rationing discussion of the 1980s. Health care is buffeted within this much greater economic/sociologic fact, and one cannot assume any solution allowing constant growth.

Thus, we have seen the beginnings of approaches designed to limit health care expenditures. DRGs and the recently enacted freeze on physicians' Medicare fees are clear examples of such efforts, as is governmental support and encouragement of alternative delivery systems such as HMOs.

HCFA Tabulation of Participating Physicians

State	MDs and DOs Participating	Percent Participating	State Rank
Alabama	2,695	53.9	1
Alaska	52	9.4	50
Arizona	922	17.9	44
Arkansas	1,409	44.6	8
California	15,071	29.9	22
Colorado	1,183	38.0	12
Connecticut	1,031	23.3	31
Delaware	886	33.3	19
D.C.	3,832	52.9	2
Florida	4,599	23.8	29
Georgia	3,247	34.9	16
Hawaii	610	18.2	42
Idaho	138	11.0	47
Illinois	4,453	23.5	30
Indiana	1,119	19.4	39
Iowa	1,975	35.9	14
Kansas	1,664	52.9	2
Kentucky	1,976	23.3	31
Louisiana	1,393	29.4	23
Maine	741	35.0	15
Maryland	1,778	30.4	21
Massachusetts	4,608	47.9	6
Michigan	6,861	43.4	9
Minnesota	1,778	18.0	43
Mississippi	618	20.5	37
Missouri	3,379	34.1	18
Montana	233	19.0	40
Nebraska	572	22.2	36
Nevada	758	38.0	12
New Hampshire	389	27.5	25
New Jersey	1,993	19.0	40
New Mexico	1,132	48.6	5
New York	8,310	21.7	26
North Carolina	3,310	39.4	11
North Dakota	149	10.4	49
Ohio	5,101	22.6	35
Oklahoma	780	12.8	47
Oregon	561	13.8	45
Pennsylvania	15,818	51.1	4
Rhode Island	730	46.0	7
South Carolina	436	13.5	46
South Dakota	63	5.6	51
Tennessee	1,251	23.9	28
Texas	6,026	20.2	38
Utah	703	31.4	20
Vermont	385	47.4	10
Virginia	1,953	28.7	24
Washington	2,271	27.2	27
West Virginia	1,007	23.1	33
Wisconsin	2,802	34.7	17
Wyoming	176	22.7	34

Who knows what will be the next, possibly much more permanent, proposed "solution" to the economic squeeze? Perhaps capitation (payment per patient rather than per procedure) will be imposed on doctors' services. Perhaps uniform fee schedules will be imposed by the federal government, and/or by insurers and employers, just as we are already encountering a national schedule of lab fees.

We consider one development nearly certain. The fees paid for "noncognitive procedures" will decrease significantly, since virtually all segments of society seem to agree that procedure fees are far too high. Open-heart surgery, intraocular lens implantations, cardiac catheterization, and fiberoptic procedures are examples of allegedly overpriced services.

2. *Governmental Pressures.* While many people predict a continued growth in governmental regulation of private medical practice, we see it a bit differently. We instead expect government's effort will be to create the conditions that will make medicine less rewarding economically. DRGs, fee schedules, HMO support, and "all payers" limits on reimbursement levels are not so much regulation as they are pressures on practice economics.

Government policy is directly and indirectly influencing doctors' incomes. There is little hope of effectively curbing that influence by court action, for physicians hardly have a constitutional right to their economic well-being. If government can regulate banks, control natural gas prices, and impose laws on corporate takeovers—all of what are understood to be for the public's benefit—it also can affect medical economics.

3. *Increasing Supply.* Like another arm of the pincer, these restrictions on the demand for medical services come at a time of tremendous increase in the supply of those services. The number of physicians in practice now is vastly higher than before and the predictions for 1990 project a still higher number. While doctors tended to dismiss the projections just a couple of years ago, almost all of them now see the continually increasing number of colleagues—or competitors—in their specialties.

The pincering effect means that conflict virtually is inevitable at the physician level. It probably will result in the virtual annihilation of some ancillary medical occupations such as physicians' assistants, respiratory therapy and the like; doctors may be happy to do the work of those people in view of the available time and the need for income.

4. *Resulting Competition.* These various circumstances show why competition among medical providers is increasing. The pincers of a shrinking pool invaded by a growing number of fingers virtually preordain competition no matter how noble the profession may be.

Much of the competition comes from alternate providers. HMOs are developing everywhere; physicians, in town after town, hold discussion sessions to consider how they should cope with actual or rumored HMO incursions. Nationally, HMOs now have some

20,000,000 patients and are predicted to have 50,000,000 by 1993.

The convenience facilities (urgicenters and immediate care centers and other titles) also are doing quite well. We know of some practices badly affected by the expanded hours and aggressive marketing which nearby facilities feature. Those new facilities are providing a feature important to consumers these days—convenience.

Hospitals are delving into medical practice even though it may be technically illegal. In their battle to survive, vertical integration of health care services becomes one of their possible salvations. And that integration injects hospitals right into the privately practicing physicians' turf.

But physicians' main competition comes from other physicians. Specialty-crossing is evidenced as doctors seek to provide more services that might maintain their incomes (e.g. allergy and facial plastic surgery). Advertising is on the rise and will continue to grow. And as "premier groups" contract for bulk patient care, the patients gained are lost by other privately practicing doctors.

5. *Antitrust Law.* A prime example of inter-doctor competition and turbulence is baring itself these days. Medicine has entered the business world enough to be the hot topic in antitrust law.

Medical staff admission and privileges are vital issues for doctors on both sides—both the "ins" and those who seek to be "in." There are a number of cases which are widely known to lawyers and physicians. These cases involve millions of dollars in legal fees as well as untold potential liability if they are ultimately decided in favor of the plaintiffs involved.

Even though hospitals are codefendants in these various lawsuits, physicians may themselves be at risk. In fact, medical staffs may be held liable separately from their hospitals. Doctors no longer can hide behind their hospitals' skirts.

Antitrust law arises in nonhospital practice situations as well. For example, while we have participated in more group mergers than ever before, some of these joinders touch the ill-defined, and still rather conjectural, antitrust rules as they might apply to health care. And yet antitrust suits are so expensive and, if lost, so economically devastating, that doctors cannot take chances. Physicians are "big business" when those laws are involved.

Prescriptions: What should the currently successful practicing physician do given this description? Except for those who elect to ride their practices out for five or ten years, probably with declining patient volume as they move to retirement, we believe doctors should emphasize the following philosophy: "The best way to manage change is to anticipate it."

Changed conditions offer opportunities as well as problems. In the airline and steel industries, some companies are suffering and even dropping out while others take advantage of new market conditions. We see the same scenarios in medicine, for some practices are growing and prospering despite the events we discussed. They have adapted to the changed environment while still giving the same high-quality medical care.

Here are some of the major approaches and basic philosophies we believe are essential for such success.

a. *Business Planning:* Doctors tend to resist the idea that hardheaded business planning makes sense in their professional practices. It cannot be disregarded and it cannot be done halfheartedly.

The first act of business planning is to identify the broad goals and how they fit into both present structure and projected financial resources. These goals cannot be all-encompassing, for we find it necessary these days to establish areas of pre-eminence, even if other areas must be abandoned. For example, internists may have to decide if they are to be primary care doctors or referral specialists; it is becoming harder to be in both camps and prosper in either one.

As to the finally agreed planning document, there must be a reasonable consensus among the practice's participants. In a solo practice, at least the manager and key staff members should accept the goals, while all physican-members of a group practice should be comfortable with the major directions. Those who are unwilling to accept and work within the business plan's broad goals probably should not stay with that practice. Interestingly, business plan goals tend to be self-fulfilling to the extent that people's day-to-day actions reflect those goals.

Secondly, from the broadly stated plan should come specific strategies to be followed in order to achieve the goals. What steps should be taken—moving one's office, replacing certain personnel, promoting certain aspects of the practice, or opening a satellite office? And on what timetable?

As an example of this second phase of business planning, we recently followed up on a survey we had performed for a larger group practice six months earlier. The managing partner reported that the group had identified six primary goals and then set out over 60 specific actions to be taken. The likelihood of actually achieving their broadly stated purposes should be distinctly greater with that 60-item action plan in place.

b. *Market Share:* Given the competitive threats and the uncertainties for the next few years, we are urging an emphasis on "market share"—a practice's volume of patients as measured against the total available volume. This is not the time to lose patients, for we expect the next few years to be tolerable mainly for those doctors who have a large market share.

A larger number of patients will enable a practice to keep its income up as well as possible if the fees begin to drop. Market share certainly will permit maximum income if the system shifts over to a capitation (payment per patient) basis. As doctors and groups negotiate with hospitals, HMOs, and directly with employers, a larger volume practice should translate to greater negotiating strength.

Therefore, even if a physician must accept a lower fee on some current patient work, the lesser payments may be preferable to losing those patients—to eroding "market share." We therefore generally have favored participation in HMOs and PPOs as a means of holding on to patient volume rather than ceding the work to others.

c. *Marketing Emphasis:* Closely related to the "market share" point, the entire field of marketing has become a key element in one's practice. Marketing is, however, a far broader term than mere public relations

and advertising. It involves attention to one's business from the other person's—the consumer's—point of view.

One attribute of successful business corporations is that they are "consumer driven." They focus on anticipating and selling what the consumer wants and needs, rather than on selling what they (the sellers) want to sell. Most major new products and services originate this way—from identifying the potential buyer's preferences rather than seller's interests.

But how does being "consumer driven" apply to physicians? As one example, we believe that health care consumers are in large part business employers, labor unions, insurance companies, and the government—not individual patients. These organizations are purchasing most of the health care which physicians provide through patients. The one element major purchasers must have is a basically controllable and definable cost structure consistent with quality service.

Unfortunately, physicians have notoriously resisted adapting to this need, equating cost controls and fee restraints with compromises on quality of care. The better approach would be to seek ways to assure the large purchasers about their expense levels while maintaining normal emphasis on quality. If this means that a doctor or group might have to accept less than full fee work in order to serve a larger block of patients, that would be a good step.

Another example involves a demographic characteristic sometimes called the "nocturnal market." Goods and services increasingly are being demanded outside the traditional "9 to 5" hours. The banking industry has recognized this characteristic in a unique way, establishing automated teller machines which make bank services available 24 hours a day, seven days a week. Physicians, however, only now are beginning to shift to evening and weekend office hours. Not being consumer driven, private practitioners have preferred office hours that suited their busy lives, and until recently they had been able to call the tune.

d. *Group Practice:* Unfortunately, we do not see solo practices as the way to cope with change over the long run. We have in fact predicted that there will be significantly fewer solo and even small group (two to five doctors) practices about ten years from now.

The trend towards larger practices, both single and multispecialty, is already apparent. Groups can better allocate physician time to early mornings, late evenings, weekends, and holidays than can a solo; one physician simply cannot be available all the time, but a ten-doctor group easily can provide convenience center hours.

The larger group also can spend more meaningful dollars. It can afford to hire a high-salaried administrator with an MBA degree to help steer it through complex contract negotiations. It can purchase state-of-the-art medical equipment to keep it on the cutting edge of its specialty. And it can maintain a large enough p.r./advertising budget to bring in additional patients, while solos spending small amounts may be unable to dent the ad market.

We expect groups to jump in size from 3 to 6 doctor sizes up to 10 and 15 members over just the next few years. All practices in a given service area cannot grow. In fact, the opportunities to establish the described advantages probably will arise just once in each specialty in each community. Once a group has done so, there probably will not be room for its competitors to adapt.

e. *Physician Leadership:* One factor in practice management never changes. Whether solo practice or group (large or small), there must be effective leadership at the physician level. Success emanates from a doctor-owner's ability to set the proper tone for the entire practice; conversely, we often point out that every failure or weakness can and should be the fault of the practice's "CEO"—its chief executive officer, or the doctor in charge.

For the sole practitioner, he or she first must identify the practice's characteristics and assure that everyone concerned will conform to them. This CEO-physician must create a consistent atmosphere so the lay staff will act according to the selected goals. Planning and strategy are useless if the doctor-leader cannot, or will not, cause all concerned to act consistently with the business plan.

We find that group practices, even if just two- or three doctors, require a strong and capable leadership format to accomplish what is within reach. The most desirable structure is for a single "CEO," just as other businesses thrive or fail because of their leadership. In some practices, however, where no single physician-member fits the CEO slot, a different leadership model may be necessary. This usually will be a two or three-doctor "executive committee" specifically authorized to act as though those two or three people were, together, an individual-in-charge.

Businesses do not survive these days without good leadership, and medical practice is becoming more like other businesses. Doctors wishing to adapt to the changing health care scene need a leadership format—usually a "CEO"—in order to cope.

The circumstances for privately practicing physicians are less favorable than at any time in the past 20 years. The health care industry is not, however, alone in encountering new, rapidly changing problems. As in other business situations, these problems create opportunities as well as annoyances. Thus some doctors may prosper within the parameters of quality patient care by being alert to the circumstances and applying modern management skills to take advantage of them.

These successful practices will demonstrate our previously recited key sentence:

"The best way to manage in a changing environment is to anticipate and face head-on the change." (The Health Care Group, Bala Cynwood, PA)

POLITICAL EDUCATION CONFERENCE

The AMA is sponsoring a national political education conference. The dates are September 18 and 19 in Washington, D.C. For more information contact the AMA, 535 North Dearborn St., Chicago, IL 60610 or call (312) 645-5000.

FINI

"Don't let the fear of failure make you miss the thrill of trying."

BALANCED CALCIUM CHANNEL BLOCKADE!



Low incidence of side effects
CARDIZEM® (diltiazem HCl) produces an incidence of adverse reactions not greater than that reported with placebo therapy, thus contributing to the patient's sense of well-being.

*Cardizem is indicated in the treatment of angina pectoris due to coronary artery spasm and in the management of chronic stable angina (classic effort-associated angina) in patients who cannot tolerate therapy with beta-blockers and/or nitrates or who remain symptomatic despite adequate doses of these agents.

References:
1. Strauss WE, McIntyre KM, Parisi AF, et al: Safety and efficacy of diltiazem hydrochloride for the treatment of stable angina pectoris: Report of a cooperative clinical trial. Am J Cardiol 49:560-566, 1982.
2. Pool PE, Seagren SC, Bonanno JA, et al: The treatment of exercise-inducible chronic stable angina with diltiazem: Effect on treadmill exercise. Chest 78 (July suppl):234-238, 1980.

Reduces angina attack frequency*
42% to 46% decrease reported in multicenter study.[1]

Increases exercise tolerance*
In Bruce exercise test,[2] control patients averaged 8.0 minutes to onset of pain; Cardizem patients averaged 9.8 minutes ($P<.005$).

CARDIZEM®
(diltiazem HCl)

THE BALANCED CALCIUM CHANNEL BLOCKER

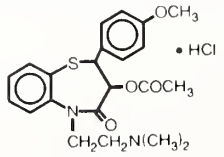
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PROFESSIONAL USE INFORMATION

cardizem®
(diltiazem HCl)
30 mg and 60 mg tablets

DESCRIPTION

CARDIZEM® (diltiazem hydrochloride) is a calcium ion influx inhibitor (slow channel blocker or calcium antagonist). Chemically, diltiazem hydrochloride is 1,5-Benzothiazepin-4(5H)one,3-(acetyloxy) -5-[2-(dimethylamino)ethyl]-2,3-dihydro-2-(4-methoxyphenyl)-, monohydrochloride,(+) -cis-. The chemical structure is:



Diltiazem hydrochloride is a white to off-white crystalline powder with a bitter taste. It is soluble in water, methanol, and chloroform. It has a molecular weight of 450.98. Each tablet of CARDIZEM contains either 30 mg or 60 mg diltiazem hydrochloride for oral administration.

CLINICAL PHARMACOLOGY

The therapeutic benefits achieved with CARDIZEM are believed to be related to its ability to inhibit the influx of calcium ions during membrane depolarization of cardiac and vascular smooth muscle.

Mechanisms of Action. Although precise mechanisms of its antianginal actions are still being delineated, CARDIZEM is believed to act in the following ways:

1. Angina Due to Coronary Artery Spasm: CARDIZEM has been shown to be a potent dilator of coronary arteries both epicardial and subendocardial. Spontaneous and ergonovine-induced coronary artery spasm are inhibited by CARDIZEM.
2. Exertional Angina: CARDIZEM has been shown to produce increases in exercise tolerance, probably due to its ability to reduce myocardial oxygen demand. This is accomplished via reductions in heart rate and systemic blood pressure at submaximal and maximal exercise work loads.

In animal models, diltiazem interferes with the slow inward (depolarizing) current in excitable tissue. It causes excitation-contraction uncoupling in various myocardial tissues without changes in the configuration of the action potential. Diltiazem produces relaxation of coronary vascular smooth muscle and dilation of both large and small coronary arteries at drug levels which cause little or no negative inotropic effect. The resultant increases in coronary blood flow (epicardial and subendocardial) occur in ischemic and nonischemic models and are accompanied by dose-dependent decreases in systemic blood pressure and decreases in peripheral resistance.

Hemodynamic and Electrophysiologic Effects. Like other calcium antagonists, diltiazem decreases sinoatrial and atrioventricular conduction in isolated tissues and has a negative inotropic effect in isolated preparations. In the intact animal, prolongation of the AH interval can be seen at higher doses.

In man, diltiazem prevents spontaneous and ergonovine-provoked coronary artery spasm. It causes a decrease in peripheral vascular resistance and a modest fall in blood pressure and, in exercise tolerance studies in patients with ischemic heart disease, reduces the heart rate-blood pressure product for any given work load. Studies to date, primarily in patients with good ventricular function, have not revealed evidence of a negative inotropic effect; cardiac output, ejection fraction, and left ventricular end diastolic pressure have not been affected. There are as yet few data on the interaction of diltiazem and beta-blockers. Resting heart rate is usually unchanged or slightly reduced by diltiazem.

Intravenous diltiazem in doses of 20 mg prolongs AH conduction time and AV node functional and effective refractory periods approximately 20%. In a study involving single oral doses of 300 mg of CARDIZEM in six normal volunteers, the average maximum PR prolongation was 14% with no instances of greater than first-degree AV block. Diltiazem-associated prolongation of the AH interval is not more pronounced in patients with first-degree heart block. In patients with sick sinus syndrome, diltiazem significantly prolongs sinus cycle length (up to 50% in some cases).

Chronic oral administration of CARDIZEM in doses of up to 240 mg/day has resulted in small increases in PR interval, but has not usually produced abnormal prolongation. There were, however, three instances of second-degree AV block and one instance of third-degree AV block in a group of 959 chronically treated patients.

Pharmacokinetics and Metabolism. Diltiazem is absorbed from the tablet formulation to about 80% of a reference capsule and is subject to an extensive first-pass effect, giving an absolute bioavailability (compared to intravenous dosing) of about 40%. CARDIZEM undergoes extensive hepatic metabolism in which 2% to 4% of the unchanged drug appears in the urine. In vitro binding studies show CARDIZEM is 70% to 80% bound to plasma proteins. Competitive ligand binding studies have also shown CARDIZEM binding is not altered by therapeutic concentrations of digoxin, hydrochlorothiazide, phenylbutazone, propranolol, salicylic acid, or warfarin. Single oral doses of 30 to 120 mg of CARDIZEM result in detectable plasma levels within 30 to 60 minutes and peak plasma levels two to three hours after drug administration. The plasma elimination half-life following single or multiple drug administration is approximately 3.5 hours. Desacetyl diltiazem is also present in the plasma at levels of 10% to 20% of the parent drug and is 25% to 50% as potent a coronary vasodilator as diltiazem. Therapeutic blood levels of CARDIZEM appear to be in the range of 50 to 200 ng/ml. There is a departure from dose-linearity when single doses above 60 mg are given; a 120-mg dose gave blood levels three times that of the 60-mg dose. There is no information about the effect of renal or hepatic impairment on excretion or metabolism of diltiazem.

INDICATIONS AND USAGE

1. **Angina Pectoris Due to Coronary Artery Spasm.** CARDIZEM is indicated in the treatment of angina pectoris due to coronary artery spasm. CARDIZEM has been shown effective in the treatment of spontaneous coronary artery spasm presenting as Prinzmetal's variant angina (resting angina with ST-segment elevation occurring during attacks).
2. **Chronic Stable Angina (Classic Effort-Associated Angina).** CARDIZEM is indicated in the management of chronic stable angina. CARDIZEM has been effective in controlled trials in reducing angina frequency and increasing exercise tolerance.

There are no controlled studies of the effectiveness of the concomitant use of diltiazem and beta-blockers or of the safety of this combination in patients with impaired ventricular function or conduction abnormalities.

CONTRAINDICATIONS

CARDIZEM is contraindicated in (1) patients with sick sinus syndrome except in the presence of a functioning ventricular pacemaker, (2) patients with second- or third-degree AV block except in the presence of a functioning ventricular pacemaker, and (3) patients with hypotension (less than 90 mm Hg systolic).

WARNINGS

1. **Cardiac Conduction.** CARDIZEM prolongs AV node refractory periods without significantly prolonging sinus node recovery time, except in patients with sick sinus syndrome. This effect may rarely result in abnormally slow heart rates (particularly in patients with sick sinus syndrome) or second- or third-degree AV block (six of 1243 patients for 0.48%). Concomitant use of diltiazem with beta-blockers or digitalis may result in additive effects on cardiac conduction. A patient with Prinzmetal's angina developed periods of asystole (2 to 5 seconds) after a single dose of 60 mg of diltiazem.
2. **Congestive Heart Failure.** Although diltiazem has a negative inotropic effect in isolated animal tissue preparations, hemodynamic studies in humans with normal ventricular function have not shown a reduction in cardiac index nor consistent negative effects on contractility (dp/dt). Experience with the use of CARDIZEM alone or in combination with beta-blockers in patients with impaired ventricular function is very limited. Caution should be exercised when using the drug in such patients.
3. **Hypotension.** Decreases in blood pressure associated with CARDIZEM therapy may occasionally result in symptomatic hypotension.
4. **Acute Hepatic Injury.** In rare instances, patients receiving CARDIZEM have exhibited reversible acute hepatic injury as evidenced by moderate to extreme elevations of liver enzymes. (See PRECAUTIONS and ADVERSE REACTIONS.)

PRECAUTIONS

General. CARDIZEM (diltiazem hydrochloride) is extensively metabolized by the liver and excreted by the kidneys and in bile. As with any new drug given over prolonged periods, laboratory parameters should be monitored at regular intervals. The drug should be used with caution in patients with impaired renal or hepatic function. In subacute and chronic dog and rat studies designed to produce toxicity, high doses of diltiazem were associated with hepatic damage. In special subacute hepatic studies, oral doses of 125 mg/kg and higher in rats were associated with histological changes in the liver which were reversible when the drug was discontinued. In dogs, doses of 20 mg/kg were also associated with hepatic changes; however, these changes were reversible with continued dosing.

Drug Interaction. Pharmacologic studies indicate that there may be additive effects in prolonging AV conduction when using beta-blockers or digitalis concomitantly with CARDIZEM. (See WARNINGS).

Controlled and uncontrolled domestic studies suggest that concomitant use of CARDIZEM and beta-blockers or digitalis is usually well tolerated. Available data are not sufficient, however, to predict the effects of concomitant treatment, particularly in patients with left ventricular dysfunction or cardiac conduction abnormalities. In healthy volunteers, diltiazem has been shown to increase serum digoxin levels up to 20%.

Carcinogenesis, Mutagenesis, Impairment of Fertility. A 24-month study in rats and a 21-month study in mice showed no evidence of carcinogenicity. There was also no mutagenic response in in vitro bacterial tests. No intrinsic effect on fertility was observed in rats.

Pregnancy. Category C. Reproduction studies have been conducted in mice, rats, and rabbits. Administration of doses ranging from five to ten times greater (on a mg/kg basis) than the daily recommended therapeutic dose has resulted in embryo and fetal lethality. These doses, in some studies, have been reported to cause skeletal abnormalities. In the perinatal/postnatal studies, there was some reduction in early individual pup weights and survival rates. There was an increased incidence of stillbirths at doses of 20 times the human dose or greater.

There are no well-controlled studies in pregnant women; therefore, use CARDIZEM in pregnant women only if the potential benefit justifies the potential risk to the fetus.

Nursing Mothers. It is not known whether this drug is excreted in human milk. Because many drugs are excreted in human milk, exercise caution when CARDIZEM is administered to a nursing woman if the drug's benefits are thought to outweigh its potential risks in this situation.

Pediatric Use. Safety and effectiveness in children have not been established.

ADVERSE REACTIONS

Serious adverse reactions have been rare in studies carried out to date, but it should be recognized that patients with impaired ventricular function and cardiac conduction abnormalities have usually been excluded.

In domestic placebo-controlled trials, the incidence of adverse reactions reported during CARDIZEM therapy was not greater than that reported during placebo therapy.

The following represent occurrences observed in clinical studies which can be at least reasonably associated with the pharmacology of calcium influx inhibition. In many cases, the relationship to CARDIZEM has not been established. The most common occurrences, as well as their frequency of presentation, are: edema (2.4%), headache (2.1%), nausea (1.9%), dizziness (1.5%), rash (1.3%), asthenia (1.2%), AV block (1.1%). In addition, the following events were reported infrequently (less than 1%) with the order of presentation corresponding to the relative frequency of occurrence.

Cardiovascular:	Flushing, arrhythmia, hypotension, bradycardia, palpitations, congestive heart failure, syncope.
Nervous System:	Paresthesia, nervousness, somnolence, tremor, insomnia, hallucinations, and amnesia.
Gastrointestinal:	Constipation, dyspepsia, diarrhea, vomiting, mild elevations of alkaline phosphatase, SGOT, SGPT, and LDH.
Dermatologic:	Pruritus, petechiae, urticaria, photosensitivity.
Other:	Polyuria, nocturia.

The following additional experiences have been noted:

A patient with Prinzmetal's angina experiencing episodes of vasospastic angina developed periods of transient asymptomatic asystole approximately five hours after receiving a single 60-mg dose of CARDIZEM.

The following postmarketing events have been reported infrequently in patients receiving CARDIZEM: erythema multiforme; leukopenia; and extreme elevations of alkaline phosphatase, SGOT, SGPT, LDH, and CPK. However, a definitive cause and effect between these events and CARDIZEM therapy is yet to be established.

OVERDOSAGE OR EXAGGERATED RESPONSE

Overdosage experience with oral diltiazem has been limited. Single oral doses of 300 mg of CARDIZEM have been well tolerated by healthy volunteers. In the event of overdosage or exaggerated response, appropriate supportive measures should be employed in addition to gastric lavage. The following measures may be considered:

Bradycardia	Administer atropine (0.60 to 1.0 mg). If there is no response to vagal blockade, administer isoproterenol cautiously.
High-Degree AV Block	Treat as for bradycardia above. Fixed high-degree AV block should be treated with cardiac pacing.
Cardiac Failure	Administer inotropic agents (isoproterenol, dopamine, or dobutamine) and diuretics.
Hypotension	Vasopressors (eg, dopamine or levarterenol bitartrate).

Actual treatment and dosage should depend on the severity of the clinical situation and the judgment and experience of the treating physician.

The oral LD_{50}'s in mice and rats range from 415 to 740 mg/kg and from 560 to 810 mg/kg, respectively. The intravenous LD_{50}'s in these species were 60 and 38 mg/kg, respectively. The oral LD_{50} in dogs is considered to be in excess of 50 mg/kg, while lethality was seen in monkeys at 360 mg/kg. The toxic dose in man is not known, but blood levels in excess of 800 ng/ml have not been associated with toxicity.

DOSAGE AND ADMINISTRATION

Exertional Angina Pectoris Due to Atherosclerotic Coronary Artery Disease or Angina Pectoris at Rest Due to Coronary Artery Spasm. Dosage must be adjusted to each patient's needs. Starting with 30 mg four times daily, before meals and at bedtime, dosage should be increased gradually (given in divided doses three or four times daily) at one- to two-day intervals until optimum response is obtained. Although individual patients may respond to any dosage level, the average optimum dosage range appears to be 180 to 240 mg/day. There are no available data concerning dosage requirements in patients with impaired renal or hepatic function. If the drug must be used in such patients, titration should be carried out with particular caution.

Concomitant Use With Other Antianginal Agents:

1. **Sublingual NTG** may be taken as required to abort acute anginal attacks during CARDIZEM therapy.
2. **Prophylactic Nitrate Therapy**—CARDIZEM may be safely coadministered with short- and long-acting nitrates, but there have been no controlled studies to evaluate the antianginal effectiveness of this combination.
3. **Beta-blockers.** (See WARNINGS and PRECAUTIONS.)

HOW SUPPLIED

Cardizem 30-mg tablets are supplied in bottles of 100 (NDC DD88-1771-47) and in Unit Dose Identification Paks of 100 (NDC DD88-1771-49). Each green tablet is engraved with MARION on one side and 1771 engraved on the other. CARDIZEM 60-mg scored tablets are supplied in bottles of 100 (NDC DD88-1772-47) and in Unit Dose Identification Paks of 100 (NDC DD88-1772-49). Each yellow tablet is engraved with MARION on one side and 1772 on the other.

Issued 4/1/8

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A Case For A No-Fault Compensation System

The ultimate solution to the malpractice problem is on the horizon. This essay describes an answer.

Efforts to resolve the malpractice problem in the United States generally have insurance alternatives or tort law modification, as well as recommendations for preventive action in the health care industry. Insurance programs are of obvious importance, since availability and reasonable premium structure are essential to continuing health care practice. Tort law modification has been difficult to obtain, and has not proved significantly effective, since available data indicated that only total award limitation and collateral source modification have produced measurable short-term mitigation. Preventive programs are important, but an irreducible number of injuries nevertheless will occur.

Innovative concepts, therefore, are assuming increasing significance. Their overall thrust is the evolving recognition of the health care injury arising out of modern health care delivery, and the increasing consensus that compensation for such injury, and assistance in rehabilitation, should not depend upon the proof of fault.[1-4] Definition of the injury, or compensable event, continues to be the major challenge in several available studies.[5-6] Initial concerns about unfavorable cost impact are being re-evaluated in the light of present monetary values and enormous awards. Other components of a compensation system include the measurement of damages, the form or amount of compensation, the source of compensation funds, case-disposition mechanisms, fund collection and disbursement, and methods of dispute resolution. Three apparently successful injury compensation systems, the New Zealand Accident Compensation Act,[7-10] the Swedish Patient Injury Insurance Plan,[11-13] and the Workers' Compensation System in the United States, are available models for analysis and comparison.

New Zealand, since 1974, has defined personal injury by accident to include "medical, surgical, dental, or first aid misadventure." The program merges workers' compensation and automobile protection, and adds coverage for victims of other accidents. Common law actions for negligence are precluded to the extent that an injury is compensable under the no-fault system, but it is not yet clear which cases will be compensated and which will be litigated. Financing is by levies on employers and self-employed persons, levies on owners and drivers of motor vehicles, and money appropriated by Parliament.

Benefits include medical care, transportation to the physician or hospital, funeral expenses, awards for permanent loss or impairment of function, payment for lost earnings, and limited awards for disfigurement or pain and suffering. In exchange for the new program, the injured person has traded the dubious advantage of litigation of torts for a quick and informal administrative procedure. He has traded the possibility of a large award for a more certain, modest payment for injuries, limited pain and suffering, and assurances of income maintenance.

After four years of operation, this innovative program appeared to be working well. Claims were processed rapidly and routinely, and with an acceptable administrative cost. Few claims were appealed beyond the initial level and most were paid without attorney involvement. One of the major difficulties was ascertaining the range of coverage intended by the statutory words.

Sweden, in 1975, established a patient insurance program after general realization that few medical malpractice claims resulted in compensation for the patient. The primary goal was to create a provider-financed scheme for compensating victims of significant medical injuries in three categories: 1) an injury that occurred as a direct consequence of examination, medication, and treatment, and that was not associated with known risks, but excluding injuries or illnesses likely to have arisen irrespective of care rendered; 2) an injury that occurred as a result of incorrect diagnosis or an incorrect interpretation of symptoms, that is, procedures not reflecting generally accepted medical practice; and 3) an injury that occurred as a result of a sudden external event within the health care institution or during transportation by ambulance.

Negligence was discarded as a standard of payment, and the mechanism for discipline of providers was separated from the compensation program. Insurance coverage to pay claimants is purchased from a pool of private carriers by private and government-employed

*This item from the Department of Professional Liability Control, MSNJ, was prepared by James E. George, M.D., J.D., and A. Ronald Rouse, who are, respectively, Director of the Department and Director of Special Projects.

health care providers. Claims are submitted to an insurance office, and most then are paid directly. Appeals are possible to a claims panel, and thereafter may be submitted to arbitration. The patient initially retains the right to proceed in the court system, or may file a complaint with the National Board of Health and Welfare.

Objectives of the program were to overcome some of the disadvantages in the prior fault-based system, and to accomplish speedy resolution of claims without the adversary process and litigation. Results of the program do not indicate generation of unduly large numbers of claims, and do not indicate extensive investigation of claims, or contests in the level of awards. Review of the program's development will establish the extent of these results, as well as the effects of separating the compensatory side of medical malpractice from the disciplinary aspects.

Workers' compensation, the oldest branch of modern social insurance, became part of the European legal system long before its acceptance in the United States. Beginning in Germany with the enactment of an Employer's Liability Law in 1871, a number of other continental powers adopted industrial accident insurance acts before the turn of the century. England followed with the Employer's Liability Act of 1880. In the United States, in 1909, Montana enacted a state compensation system for the coal mining industry. Subsequently in 1911, the largest number of state statutes were enacted, and in 1917 constitutional barriers were removed when the federal Supreme Court upheld the three existing types of compensaton laws. The adoption of a compensation act by Mississippi in 1948 made the system universal.

Thus, in a span of approximately 80 years, the inadequacies of the tort system gradually were corrected so that the victims of industrial accidents and their families adequately and promptly were protected. New legal principles were needed, but legislators were slow to grasp this necessity. These new principles established that the great bulk of work accidents should be regarded as part of the unavoidable loss of modern industrial operations, and should not be approached with concepts of fault. The accident toll presently in American industry is nearly 43 million working days annually; at least 16,500 deaths occur each year through routine industrial operations; and accidental limitation of earning capacity involves more than 2 million other workers. Compensation is payable according to a definite scheme. Payment is secured by employers through private insurance, state funds, or self-insurance. Fault has been eliminated. The compensation represents a compromise in which each party surrenders certain advantages in order to gain others more important to him/her and to society. Employers give up the immunity they would enjoy in cases where they are not at fault, and employees accept a smaller, but certain and prompt compensation.

This system appears to have resolved the problems of industrial accident compensation, and no serious argument has appeared for return to the tort system. Should it not be asked why the same scheme is not equally appropriate for many other injuries presently administered under the traditional fault system of tort law?[14]

CONCLUSIONS

Tort law approaches to the medical malpractice problem have not resulted in a permanent solution due to the inherent disadvantages of the fault approach. In health care, profoundly negative effects involve both delivery and cost. In law, pro-plaintiff changes have further extended tort law application into the realm of strict liability, and segments of the legal system have effectively opposed most legislative reforms. In government, legislation to date has provided only short-term relief, has been accompanied by disciplinary measures for providers, and principally has resulted in availability of insurance to pay the ever-increasing awards and settlements.

For the patient, high-quality health care has been accepted as an individual right in modern society, accompanied by the growing awareness that such care includes inherent risks of personal injury related to the health care process, rather than to the underlying illness. For society, the concept of the health care injury, strikingly similar to the industrial accident, appears increasingly attractive as a long-term solution of this complex problem, awarding compensation based on no-fault principles.

Many parallels exist in the evolution of the malpractice problem and in the development of workers' compensation systems, as well as in the development of present no-fault compensation programs for health care injuries in New Zealand and in Sweden. The ultimate solution thus is on the horizon, as the replacement of our venerable fault and tort law structure by an innovative no-fault compensation system. (Excerpted from: *Medical Malpractice—1985: Reflections of a Health Care Provider* by M. Martin Halley, M.D., J.D. Reprinted from the *Journal of the Kansas Medical Society* LXXXV:323-329, 1984.)

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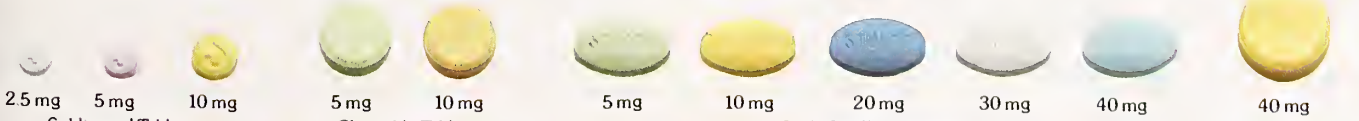


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INDICATIONS AND USAGE: SORBITRATE (isosorbide dinitrate) is indicated for the treatment and prevention of angina pectoris. All dosage forms of isosorbide dinitrate may be used prophylactically to decrease frequency and severity of anginal attacks and can be expected to decrease the need for sublingual nitroglycerin.

The sublingual and chewable forms of the drug are indicated for acute prophylaxis of angina pectoris when taken a few minutes before situations likely to provoke anginal attacks. Because of a slower onset of effect, the oral forms of isosorbide dinitrate are not indicated for acute prophylaxis.

CONTRAINDICATIONS: SORBITRATE is contraindicated in patients who have shown purported hypersensitivity or idiosyncrasy to it or other nitrates or nitrites. Epinephrine and related compounds are ineffective in reversing the severe hypotensive events associated with overdose and are contraindicated in this situation.

WARNINGS: The benefits of SORBITRATE during the early days of an acute myocardial infarction have not been established. If one elects to use organic nitrates in early infarction, hemodynamic monitoring and frequent clinical assessment should be used because of the potential deleterious effects of hypotension.

PRECAUTIONS: General: Severe hypotensive response, particularly with upright posture, may occur with even small doses of SORBITRATE. The drug should therefore be used with caution in subjects who may have blood volume depletion from diuretic therapy or in subjects who have low systolic blood pressure (eg, below 90 mmHg). Paradoxical bradycardia and increased angina pectoris may accompany nitrate-induced hypotension. Nitrate therapy may aggravate the angina caused by hypertrophic cardiomyopathy.

Marked symptomatic, orthostatic hypotension has been reported when calcium channel blockers and organic nitrates were used in combination. Dose adjustment of either class of agents may be necessary.

Tolerance to this drug and cross-tolerance to other nitrates and nitrites may occur. Tolerance to the vascular and antianginal effects of isosorbide dinitrate or nitroglycerin has been demonstrated in clinical trials, experience through occupational exposure, and in isolated tissue experiments in the laboratory. The importance of tolerance to the appropriate use of isosorbide dinitrate in the management of patients with angina pectoris has not been determined. However, one clinical trial using treadmill exercise tolerance (as an end point) found an 8-hour duration of action of oral isosorbide dinitrate following the first dose (after a 2-week placebo washout) and only a 2-hour duration of effect of the same dose after 1 week of repetitive dosing at conventional dosing intervals. On the other hand, several trials have been able to differentiate isosorbide dinitrate from placebo after 4 weeks of therapy and, in open trials, an effect seems detectable for as long as several months.

Tolerance clearly occurs in industrial workers continuously exposed to nitroglycerin. Moreover, physical dependence also occurs since chest pain, acute myocardial infarction, and even sudden death have occurred during temporary withdrawal of nitroglycerin from the workers. In clinical trials in angina patients, there are reports of anginal attacks being more easily provoked and of rebound in the hemodynamic effects soon after nitrate withdrawal. The relative importance of these observations to the routine, clinical use of isosorbide dinitrate is not known. However, it seems prudent to gradually withdraw patients from isosorbide dinitrate when the therapy is being terminated, rather than stopping the drug abruptly.

Information for Patients: Headache may occur during initial therapy with SORBITRATE. Headache is usually relieved by the use of standard headache remedies or by lowering the dose and tends to disappear after the first week or two of use.

Drug Interactions: Alcohol may enhance any marked sensitivity to the hypotensive effect of nitrates.

Isosorbide dinitrate acts directly on vascular smooth muscle, therefore, any other agent that depends on vascular smooth muscle as the final common path can be expected to have decreased or increased effect depending on the agent.

Carcinogenesis, Mutagenesis, Impairment of Fertility: No long-term studies in animals have been performed to evaluate the carcinogenic potential of this drug. A modified two-litter reproduction study in rats fed isosorbide dinitrate at 25 or 100 mg/kg/day did not reveal any effects on fertility or gestation or any remarkable gross pathology in any parent or offspring fed isosorbide dinitrate as compared with rats fed a basal-controlled diet.

Pregnancy Category C: Isosorbide dinitrate has been shown to cause a dose-related increase in embryotoxicity (increase in mummified pups) in rabbits at oral doses 35 and 150 times the maximum recommended human daily dose. There are no adequate and well-controlled studies in pregnant women. SORBITRATE should be used during pregnancy only if the potential benefit justifies the potential risk to the fetus.

Nursing Mothers: It is not known whether this drug is excreted in human milk. Because many drugs are excreted in human milk, caution should be exercised when SORBITRATE is administered to a nursing woman.

Pediatric Use: The safety and effectiveness of SORBITRATE in children has not been established.

ADVERSE REACTIONS: Adverse reactions, particularly headache and hypotension, are dose-related. In clinical trials at various doses, the following have been observed.

Headache is the most common (reported incidence varies widely, apparently being dose-related, with an average occurrence of about 25%) adverse reaction and may be severe and persistent. Cutaneous vasodilation with flushing may occur. Transient episodes of dizziness and weakness, as well as other signs of cerebral ischemia associated with postural hypotension, may occasionally develop (the incidence of reported symptomatic hypotension ranges from 2% to 36%). An occasional individual will exhibit marked sensitivity to the hypotensive effects of nitrates and severe responses (nausea, vomiting, weakness, restlessness, pallor, perspiration, and collapse) may occur even with the usual therapeutic dose. Drug rash and/or exfoliative dermatitis may occasionally occur. Nausea and vomiting appear to be uncommon. Case reports of clinically significant methemoglobinemia are rare at conventional doses of organic nitrates. The formation of methemoglobin is dose-related and, in the case of genetic abnormalities of hemoglobin that favor methemoglobin formation, even conventional doses of organic nitrate could produce harmful concentrations of methemoglobin.

DOSAGE AND ADMINISTRATION: For the treatment of angina pectoris, the usual starting dose for sublingual SORBITRATE is 2.5 to 5 mg; for chewable tablets, 5 mg; for oral (swallowed) tablets, 5 to 20 mg, and for controlled-release forms, 40 mg.

SORBITRATE should be titrated upward until angina is relieved or side effects limit the dose. In ambulatory patients, the magnitude of the incremental dose increase should be guided by measurements of standing blood pressure.

The initial dosage of sublingual or chewable SORBITRATE for prophylactic therapy in angina pectoris patients is generally 5 or 10 mg every 2 to 3 hours. Adequate controlled clinical studies demonstrating the effectiveness of chronic maintenance therapy with these dosage forms have not been reported.

SORBITRATE in oral doses of 10 to 40 mg given every 6 hours or in oral controlled-release doses of 40 to 80 mg given every 8 to 12 hours is generally recommended. The extent to which development of tolerance should modify the dosage program has not been defined. *The oral controlled-release forms of isosorbide dinitrate should not be chewed.*

DOSAGE FORMS AVAILABLE: Sublingual Tablets (2.5, 5, 10 mg); Chewable Tablets (5, 10 mg); Oral Tablets (5, 10, 20, 30, 40 mg); Sustained Action Tablets (40 mg).

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Evaluating Emergency Department Care

JAMES E. GEORGE, M.D., J.D.*

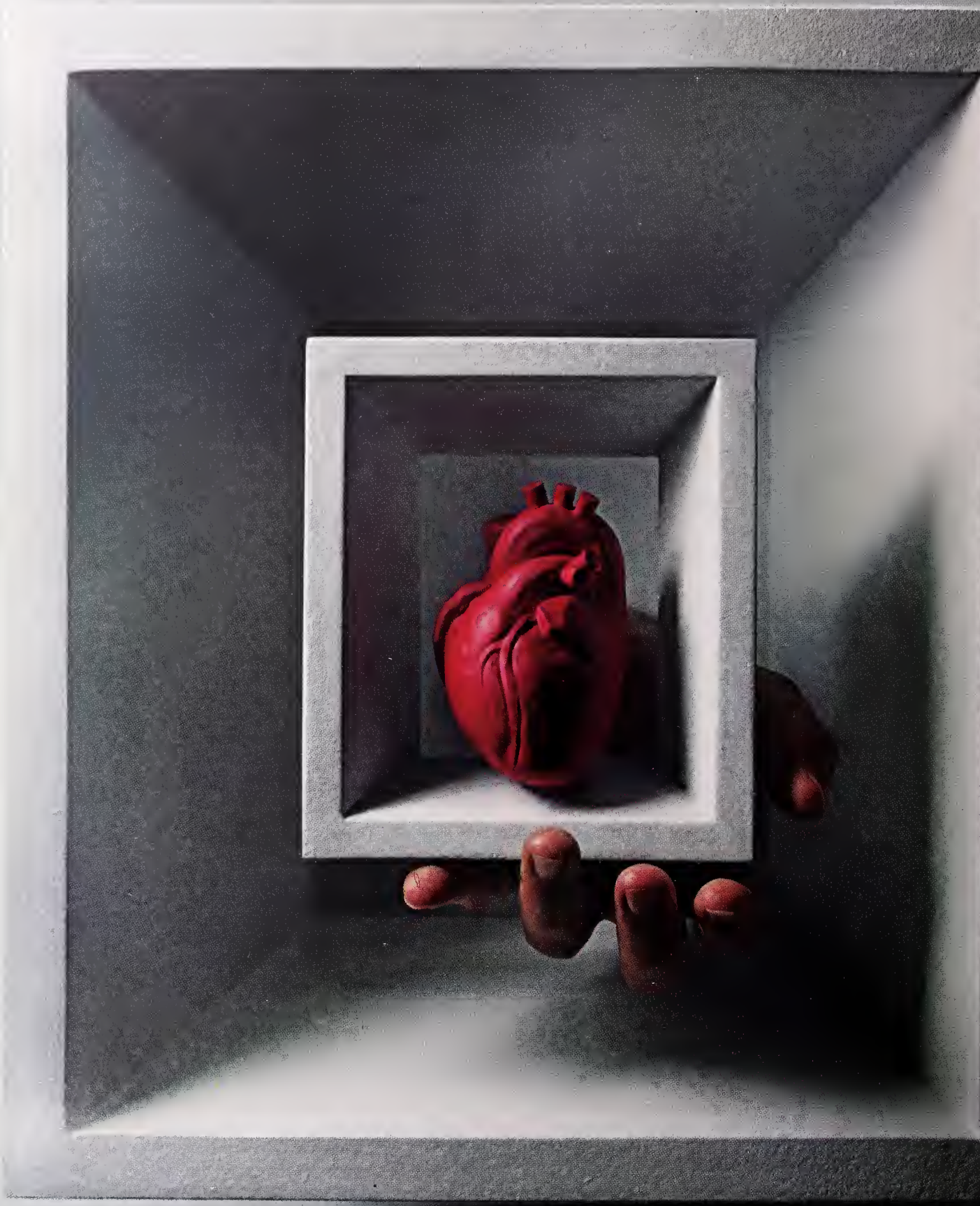
The author presents his comments on emergency department care, responding to an article on page 523.

I have read the article by William A. Dwyer, M.D., regarding "A Method for Evaluating Emergency Department Care: Initial Observations" (page 523) in this issue.

Since I practice emergency medicine, I must confess to a particular bias against this article. First, I take serious issue with an article which attempts to quantify the frequency of a bona fide emergency department case and at the same time "focus out" of the data review all of those cases which clearly are bona fide emergencies, such as all admitted cases, lacerations, and fractures. Second, I am concerned about the conclusions of the article regarding such issues as emergency department patient waiting times, interference of nonemergency case treatment with treatment for emergency cases, and, finally, the "expenditure of scarce health dollars in an inappropriate fashion."

My opinions as a past president of the New Jersey Chapter of the American College of Emergency Physicians and as a board certified emergency physician are as follows: Emergency department waiting times are a result of many complicating factors including turn-around time for lab and x-ray results. Also, it is clear to anyone who asks a Medicaid patient that many of these patients come to the emergency department because private practitioners refuse to treat Medicaid patients due to reimbursement concerns. Finally, although treatment of Medicaid patients is more expensive in the emergency department if only due to the added hospital facility charge, I do not think anybody could coordinate a patient care system more adequate or accessible on a 24-hour per day basis than the emergency department. We in emergency medicine need our share of nonemergent patients in order to maintain our primary care skills and, quite candidly, in order to lend some financial support to the cost of providing true emergency care.

*Dr. George is a Fellow of the American College of Emergency Physicians and President of the Emergency Physician Associates, P.A., Woodbury.



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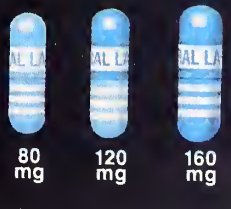
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Dosage may be increased to 160 mg once daily, as needed, to achieve optimal control. INDERAL LA should not be used in congestive heart failure, sinus bradycardia, cardiogenic shock, heart block greater than first degree, and bronchial asthma. Please see next page for further details and brief summary of prescribing information.

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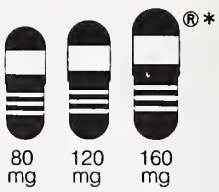


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DESCRIPTION. Inderal LA is formulated to provide a sustained release of propranolol hydrochloride. Inderal LA is available as 80 mg, 120 mg, and 160 mg capsules.
CLINICAL PHARMACOLOGY. INDERAL is a nonselective beta-adrenergic receptor blocking agent possessing no other autonomic nervous system activity. It specifically competes with beta-adrenergic receptor stimulating agents for available receptor sites. When access to beta-receptor sites is blocked by INDERAL, the chronotropic, inotropic, and vasodilator responses to beta-adrenergic stimulation are decreased proportionately.
INDERAL LA Capsules (80, 120, and 160 mg) release propranolol HCl at a controlled and predictable rate. Peak blood levels following dosing with INDERAL LA occur at about 6 hours and the apparent plasma half-life is about 10 hours. When measured at steady state over a 24-hour period the areas under the propranolol plasma concentration-time curve (AUCs) for the capsules are approximately 60% to 65% of the AUCs for a comparable divided daily dose of INDERAL tablets. The lower AUCs for the capsules are due to greater hepatic metabolism of propranolol, resulting from the slower rate of absorption of propranolol. Over a twenty-four (24) hour period, blood levels are fairly constant for about twelve (12) hours then decline exponentially.
INDERAL LA should not be considered a simple mg for mg substitute for conventional propranolol and the blood levels achieved do not match (are lower than) those of two to four times daily dosing with the same dose. When changing to INDERAL LA from conventional propranolol, a possible need for retitration upwards should be considered especially to maintain effectiveness at the end of the dosing interval. In most clinical settings, however, such as hypertension or angina where there is little correlation between plasma levels and clinical effect, INDERAL LA has been therapeutically equivalent to the same mg dose of conventional INDERAL as assessed by 24-hour effects on blood pressure and on 24-hour exercise responses of heart rate, systolic pressure and rate pressure product. INDERAL LA can provide effective beta blockade for a 24-hour period.
The mechanism of the antihypertensive effect of INDERAL has not been established. Among the factors that may be involved in contributing to the antihypertensive action are (1) decreased cardiac output, (2) inhibition of renin release by the kidneys, and (3) diminution of tonic sympathetic nerve outflow from vasomotor centers in the brain. Although total peripheral resistance may increase initially, it readjusts to or below the pretreatment level with chronic use. Effects on plasma volume appear to be minor and somewhat variable. INDERAL has been shown to cause a small increase in serum potassium concentration when used in the treatment of hypertensive patients.
In angina pectoris, propranolol generally reduces the oxygen requirement of the heart at any given level of effort by blocking the catecholamine-induced increases in the heart rate, systolic blood pressure, and the velocity and extent of myocardial contraction. Propranolol may increase oxygen requirements by increasing left ventricular fiber length, end diastolic pressure and systolic ejection period. The net physiologic effect of beta-adrenergic blockade is usually advantageous and is manifested during exercise by delayed onset of pain and increased work capacity.
In dosages greater than required for beta blockade, INDERAL also exerts a quinidine-like or anesthetic-like membrane action which affects the cardiac action potential. The significance of the membrane action in the treatment of arrhythmias is uncertain.
The mechanism of the antimigraine effect of propranolol has not been established. Beta-adrenergic receptors have been demonstrated in the pial vessels of the brain.
Beta receptor blockade can be useful in conditions in which, because of pathologic or functional changes, sympathetic activity is detrimental to the patient. But there are also situations in which sympathetic stimulation is vital. For example, in patients with severely damaged hearts, adequate ventricular function is maintained by virtue of sympathetic drive which should be preserved. In the presence of AV block, greater than first degree, beta blockade may prevent the necessary facilitating effect of sympathetic activity on conduction. Beta blockade results in bronchial constriction by interfering with adrenergic bronchodilator activity which should be preserved in patients subject to bronchospasm.
Propranolol is not significantly dialyzable.
INDICATIONS AND USAGE. Hypertension: INDERAL LA is indicated in the management of hypertension; it may be used alone or used in combination with other antihypertensive agents, particularly a thiazide diuretic. INDERAL LA is not indicated in the management of hypertensive emergencies.
Angina Pectoris Due to Coronary Atherosclerosis: INDERAL LA is indicated for the long-term management of patients with angina pectoris.
Migraine: INDERAL LA is indicated for the prophylaxis of common migraine headache. The efficacy of propranolol in the treatment of a migraine attack that has started has not been established and propranolol is not indicated for such use.
Hypertrophic Subaortic Stenosis: INDERAL LA is useful in the management of hypertrophic subaortic stenosis, especially for treatment of exertional or other stress-induced angina, palpitations, and syncope. INDERAL LA also improves exercise performance. The effectiveness of propranolol hydrochloride in this disease appears to be due to a reduction of the elevated outflow pressure gradient which is exacerbated by beta-receptor stimulation. Clinical improvement may be temporary.
CONTRAINDICATIONS. INDERAL is contraindicated in 1) cardiogenic shock; 2) sinus bradycardia and greater than first degree block; 3) bronchial asthma; 4) congestive heart failure (see WARNINGS) unless the failure is secondary to a tachyarrhythmia treatable with INDERAL.
WARNINGS. CARDIAC FAILURE: Sympathetic stimulation may be a vital component supporting circulatory function in patients with congestive heart failure, and its inhibition by beta blockade may precipitate more severe failure. Although beta blockers should be avoided in overt congestive heart failure, if necessary, they can be used with close follow-up in patients with a history of failure who are well compensated and are receiving digitalis and diuretics. Beta-adrenergic blocking agents do not abolish the inotropic action of digitalis on heart muscle.
IN PATIENTS WITHOUT A HISTORY OF HEART FAILURE, continued use of beta blockers can, in some cases, lead to cardiac failure. Therefore, at the first sign or symptom of heart failure, the patient should be digitalized and/or treated with diuretics, and the response observed closely, or INDERAL should be discontinued (gradually, if possible).

IN PATIENTS WITH ANGINA PECTORIS, there have been reports of exacerbation of angina and, in some cases, myocardial infarction, following abrupt discontinuance of INDERAL therapy. Therefore, when discontinuance of INDERAL is planned the dosage should be gradually reduced over at least a few weeks, and the patient should be cautioned against interruption or cessation of therapy without the physician's advice. If INDERAL therapy is interrupted and exacerbation of angina occurs, it usually is advisable to reinstitute INDERAL therapy and take other measures appropriate for the management of unstable angina pectoris. Since coronary artery disease may be unrecognized, it may be prudent to follow the above advice in patients considered at risk of having occult atherosclerotic heart disease who are given propranolol for other indications.

Nonallergic Bronchospasm (e.g., chronic bronchitis, emphysema)— PATIENTS WITH BRONCHOSPASTIC DISEASES SHOULD IN GENERAL NOT RECEIVE BETA BLOCKERS. INDERAL should be administered with caution since it may block bronchodilation produced by endogenous and exogenous catecholamine stimulation of beta receptors.
MAJOR SURGERY: The necessity or desirability of withdrawal of beta-blocking therapy prior to major surgery is controversial. It should be noted, however, that the impaired ability of the heart to respond to reflex adrenergic stimuli may augment the risks of general anesthesia and surgical procedures.
INDERAL (propranolol HCl), like other beta blockers, is a competitive inhibitor of beta-receptor agonists and its effects can be reversed by administration of such agents, e.g., dobutamine or isoproterenol. However, such patients may be subject to protracted severe hypotension. Difficulty in starting and maintaining the heartbeat has also been reported with beta blockers.
DIABETES AND HYPOGLYCEMIA: Beta-adrenergic blockade may prevent the appearance of certain premonitory signs and symptoms (pulse rate and pressure changes) of acute hypoglycemia in labile insulin-dependent diabetes. In these patients, it may be more difficult to adjust the dosage of insulin.
THYROTOXICOSIS: Beta blockade may mask certain clinical signs of hyperthyroidism. Therefore, abrupt withdrawal of propranolol may be followed by an exacerbation of symptoms of hyperthyroidism, including thyroid storm. Propranolol does not distort thyroid function tests.
IN PATIENTS WITH WOLFF-PARKINSON-WHITE SYNDROME, several cases have been reported in which, after propranolol, the tachycardia was replaced by a severe bradycardia requiring a demand pacemaker. In one case this resulted after an initial dose of 5 mg propranolol.
PRECAUTIONS. *General:* Propranolol should be used with caution in patients with impaired hepatic or renal function. INDERAL is not indicated for the treatment of hypertensive emergencies.
Beta adrenoreceptor blockade can cause reduction of intraocular pressure. Patients should be told that INDERAL may interfere with the glaucoma screening test. Withdrawal may lead to a return of increased intraocular pressure.
Clinical Laboratory Tests: Elevated blood urea levels in patients with severe heart disease, elevated serum transaminase, alkaline phosphatase, lactate dehydrogenase.
DRUG INTERACTIONS: Patients receiving catecholamine-depleting drugs such as reserpine should be closely observed if INDERAL is administered. The added catecholamine-blocking action may produce an excessive reduction of resting sympathetic nervous activity which may result in hypotension, marked bradycardia, vertigo, syncopal attacks, or orthostatic hypotension.
Carcinogenesis, Mutagenesis, Impairment of Fertility: Long-term studies in animals have been conducted to evaluate toxic effects and carcinogenic potential. In 18-month studies in both rats and mice, employing doses up to 150 mg/kg/day, there was no evidence of significant drug-induced toxicity. There were no drug-related tumorigenic effects at any of the dosage levels. Reproductive studies in animals did not show any impairment of fertility that was attributable to the drug.
Pregnancy: Pregnancy Category C. INDERAL has been shown to be embryotoxic in animal studies at doses about 10 times greater than the maximum recommended human dose. There are no adequate and well-controlled studies in pregnant women. INDERAL should be used during pregnancy only if the potential benefit justifies the potential risk to the fetus.
Nursing Mothers: INDERAL is excreted in human milk. Caution should be exercised when INDERAL is administered to a nursing woman.
Pediatric Use: Safety and effectiveness in children have not been established.
ADVERSE REACTIONS. Most adverse effects have been mild and transient and have rarely required the withdrawal of therapy.
Cardiovascular: bradycardia; congestive heart failure; intensification of AV block; hypotension; paresthesia of hands; thrombocytopenic purpura; arterial insufficiency, usually of the Raynaud type.
Central Nervous System: lightheadedness; mental depression manifested by insomnia, lassitude, weakness, fatigue; reversible mental depression progressing to catatonia; visual disturbances; hallucinations; an acute reversible syndrome characterized by disorientation for time and place, short-term memory loss, emotional lability, slightly clouded sensorium, and decreased performance on neuropsychometrics.
Gastrointestinal: nausea, vomiting, epigastric distress, abdominal cramping, diarrhea, constipation, mesenteric arterial thrombosis, ischemic colitis.
Allergic: pharyngitis and agranulocytosis, erythematous rash, fever combined with aching and sore throat, laryngospasm and respiratory distress.
Respiratory: bronchospasm.
Hematologic: agranulocytosis, nonthrombocytopenic purpura, thrombocytopenic purpura.
Auto-Immune: In extremely rare instances, systemic lupus erythematosus has been reported.
Miscellaneous: alopecia, LE-like reactions, psoriasiform rashes, dry eyes, male impotence, and Peyronie's disease have been reported rarely. Oculomucocutaneous reactions involving the skin, serous membranes and conjunctivae reported for a beta blocker (practolol) have not been associated with propranolol.
DOSAGE AND ADMINISTRATION. INDERAL LA provides propranolol hydrochloride in a sustained-release capsule for administration once daily. If patients are switched from INDERAL tablets to INDERAL LA capsules, care should be taken to assure that the desired therapeutic effect is maintained. INDERAL LA should not be considered a simple mg for mg substitute for INDERAL. INDERAL LA has different kinetics and produces lower blood levels. Retitration may be necessary especially to maintain effectiveness at the end of the 24-hour dosing interval.
HYPERTENSION—*Dosage must be individualized.* The usual initial dosage is 80 mg INDERAL LA once daily, whether used alone or added to a diuretic. The dosage may be increased to 120 mg once daily or higher until adequate blood-pressure control is achieved. The usual maintenance dosage is 120 to 160 mg once daily. In some instances a dosage of 640 mg may be required. The time needed for full hypertensive response to a given dosage is variable and may range from a few days to several weeks.
ANGINA PECTORIS—*Dosage must be individualized.* Starting with 80 mg INDERAL LA once daily, dosage should be gradually increased at three to seven day intervals until optimum response is obtained. Although individual patients may respond at any dosage level, the average optimum dosage appears to be 160 mg once daily. In angina pectoris, the value and safety of dosage exceeding 320 mg per day have not been established.
If treatment is to be discontinued, reduce dosage gradually over a period of a few weeks (see WARNINGS).
MIGRAINE—*Dosage must be individualized.* The initial oral dose is 80 mg INDERAL LA once daily. The usual effective dose range is 160-240 mg once daily. The dosage may be increased gradually to achieve optimum migraine prophylaxis. If a satisfactory response is not obtained within four to six weeks after reaching the maximum dose, INDERAL LA therapy should be discontinued. It may be advisable to withdraw the drug gradually over a period of several weeks.
HYPERTROPHIC SUBAORTIC STENOSIS—80-160 mg INDERAL LA once daily.
PEDIATRIC DOSAGE—At this time the data on the use of the drug in this age group are too limited to permit adequate directions for use.
*The appearance of INDERAL LA capsules is a registered trademark of Ayerst Laboratories.
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Method for Evaluating Hospital Emergency Department Treatment

William A. Dwyer, Jr., M.D., Wayne*

A method of reviewing treatment rendered in the hospital emergency department setting has been developed. This method enables interested parties to determine the types of illness being treated and provides the possibility of some judgment of the quality of care.

Following the publication of the National Academy of Sciences report *"Accidental Death and Disability"*[1] in the early 1970s, many groups have developed an interest in upgrading the care delivered in hospital emergency rooms throughout the nation, and in the delivery of emergency care in general. This interest and the subsequent passage of federal legislation funding programs for development of training courses, regionalized medical management programs, and equipment subsidization for such programs has resulted in significant upgrading of many aspects of emergency medical care. Despite the demonstrated value of some of these programs[2,3] and their attendant publicity, the general public continues to remain convinced that any hospital emergency room can handle any emergency and basically is disinterested in the need for further change and in the economics involved in its present assumptions.

Part of this disinterest rests with the lack of statistical information regarding the treatment rendered in emergency departments. The sheer volume of cases seen in most emergency departments creates problems in attempting to evaluate the care rendered. When this is coupled with personnel turnover, the ongoing crisis type of care frequently necessary, the lack of uniformity in recordkeeping from hospital to hospital, and the absence of any compelling reason to do such an analysis, it is not surprising that there is a scarcity of reports on the care being rendered in these emergency departments. What few have been done generally are confined to one hospital's experience.[4,7]

Under the stimulus of the need to evaluate carefully the expenditure of health care dollars, the New Jersey Medicaid program decided to fund a review of the emergency department management of cases as part of the overall hospital review of Medicaid cases conducted by the utilization review organizations in the state.

Because this type of review differed in several respects from traditional types of review, it was agreed that the first six months of emergency department review would be conducted on a nonbinding basis.

With this mandate, the Passaic Valley Professional Standards Review Organization (PSRO) developed and initiated a review system based on manual collection of abstract data which is entered into a computer for subsequent statistical analysis. The results of the initial portion of this review are the subject of this paper.

MATERIALS AND METHODS

The Passaic Valley PSRO services seven hospitals. However, only four of the hospitals have a significant Medicaid case load. These four hospitals are in an inner-city setting. All four hospitals maintain active

*Dr. Dwyer is Medical Director, Passaic Valley Professional Standards Review Organization. Correspondence may be addressed to Dr. Dwyer, 573 Valley Road, Wayne, NJ 07470.

TABLE 1

Hospital Case Loads

	No. Cases Per Year (1981)	No. Cases 3 Mos.	Medicaid Cases 3 Mos.
Hospital A	20,823	5,176	565
Hospital B	19,377	4,875	1,055
Hospital C	35,573	9,168	1,430
Hospital D	25,954	6,564	1,441
Total	101,727	25,783	4,491

TABLE 2

Cases Focused Out

	No. Medicaid Cases 3 Mos.	No. Categorical Emergencies No. Focused Out of Review	% Focused Out of Total	No. Reviewed	% of Total
Hospital A	565	94	16	471	84
Hospital B	1,055	211	20	844	80
Hospital C	1,430	267	18	1,163	82
Hospital D	1,441	288	20	1,153	80
Total	4,491	860	19	3,631	81

TABLE 3

Quality of Care Potential

	Reviewed No. Medicaid Cases 3 Mos.	No. Referral to Physician Advisor	No. Questioned By Physician Advisor	Percent
Hospital A	471	143	117	24.8
Hospital B	844	93	76	9.0
Hospital C	1,163	89	73	6.3
Hospital D	1,153	217	178	15.4
Total	3,631	542	444	14.9

emergency departments with relatively high volumes of cases (Table 1). Of this volume, the Medicaid cases represent 17.4 percent.

All Medicaid cases presenting to these emergency departments in the three months of March, April, and May 1982, are included in the overall sample (Table 1). Given the impetus for the institution of this survey and the general purposes of the Passaic Valley PSRO, two basic questions had to be answered on each case: is the Emergency Department visit medically necessary? and, is the care rendered to the patient of good quality?

In the interest of time conservation, several types of cases were exempt from review or "focused out" of detailed emergency department review. The types of cases "focused out" were: all admitted cases, lacerations, and fractures.

Table 2 presents the number of cases reviewed and "focused out."

A nurse coordinator with considerable emergency department experience performed the initial manual collection of data. When she perceived a potential question of quality of care, one of a panel of physician advisors was consulted. The physician then reviewed the emergency department record and made a determination on the acceptability of the treatment. The results of these findings are summarized in Table 3.

The data were collected on a form that had been developed by physicians in the area with an interest in emergency medicine. It is derived from an emergency department record devised by the Illinois Trauma Program and has been additionally modified by the Passaic Valley PSRO staff. Its utilization, in combination with a system for emergency conditions developed by the Department of Health and Human Services,[8] enables the PSRO to collect demographic data on each patient and the presenting problem, the time the patient spent in the emergency department, the diagnostic and treatment efforts rendered, and the final impression of the treating physician. It also enables the PSRO to determine essential review information—referral and denial. Further refinements of

TABLE 4

Frequency Occurrence of Final Impression

Diagnostic Impression	Frequency	Percent
Upper respiratory infections	485	13.99
Asthma	195	5.633
Head, neck, and face wounds	185	5.344
Intestinal infections	166	4.795
Tonsillitis	134	3.871
Diseases of the stomach and digestive tract	122	3.524
Bronchitis	112	3.235
Otitis media	107	3.091
General viral infection	105	3.033
Anemia	83	2.397
Lower extremity contusions	66	1.906
Upper extremity contusions	60	1.733
Urinary tract infection	54	1.560
Other diseases of skin	53	1.531
Problems, unspecified complaints	47	1.358
Ankle sprain	45	1.300
Sprain, strain, other	44	1.271
Headache pain	35	1.011
Animal and human bites	35	1.011
Carbuncle, furuncle	35	1.011
Abdominal pain cramps	34	0.982
Trunk contusion	32	0.924
Flu	31	0.895
Eczema and dermatitis	31	0.895
Allergy, unspecified	28	0.809
Pelvic inflammatory disease	28	0.809
Gastrointestinal	26	0.751
Convulsions	26	0.751
Adverse effect of medications	26	0.751
Back sprain	26	0.751
Neuroses	26	0.751
Anxiety and nervous disorders	24	0.693

this form have been made as practical experience has been gained in attempting to transfer its information to a computer.

Passaic Valley PSRO now has begun the utilization of a portable microcomputer programmed to record abstract information on site at the emergency department without the traditional problems and delays of keypunch from coded forms.

The initial capacity of the system enables Passaic Valley PSRO to analyze the presenting problems, and the final diagnoses with regard to the appropriateness of the intervening processes to reach said diagnosis, thus pinpointing problem areas of care. For example, a preponderance of referrals and/or questions of care associated with a particular final impression would indicate a need to consider carefully the correct emergency department treatment method for that particular disease. Again, the occurrence of a number of denials within a specific time frame might well indicate the existence of a physician who is not functioning at an optimal capacity in the emergency medical setting.

RESULTS

There were 25,783 cases presented to the four emergency departments in the initial three months. Of this number, 4,491 were Medicaid cases, 17.4 percent of the total. The case load was first analyzed for the frequency of visits by final diagnostic impression. These results are presented in Table 4.

There was no demonstrably significant variation from hospital to hospital in this breakdown. In other words, the case mix at the four hospital emergency departments appeared to be similar.

The occurrence of upper respiratory infection as a high frequency final impression raised a question as to the frequency of treatment for truly emergent situations. A somewhat arbitrary selection of final impressions was made (Table 5) which a consensus of staff and physicians felt represented truly emergent problems. These were added to the focused out group and elevated the total to 29.6 percent of the Medicaid emergency department load.

The Figure represents the times of arrival of patients in the emergency department. As can be seen, 32 percent of the case load presented between the hours 9:00 A.M. and 5:00 P.M. while 34 percent presented between the hours of 5:00 P.M. and 11:00 P.M. It also is of interest to note that 19 percent presented between midnight and 8:00 A.M.

Comment has been made within the health field on the number of revisits made to the emergency departments by this group of patients and this review system enabled Passaic Valley PSRO to document these. Two extreme recidivists were found. (These two were found to be complicated problems and, in cooperation with the hospital involved, an alternative treatment program has been structured for them.) The capacity of this system does allow for cross-checking patients

TABLE 5

Final Impressions

Final Impression	% of Total Reviewed	No.
Asthma	5.6	195
Abdominal pains, and pelvic inflammatory disease	1.78	62
Head, neck, and face wounds	1.3	45
Ankle sprain	1.3	45
Sprain, strain, and other	1.27	44
Infections, carbuncle, and furuncle	1.2	41
Animal and human bites	1.0	35
Epilepsy and convulsions	0.92	32
Adverse effects of medication	0.75	26
Pneumonia	0.63	22
Epistaxis	0.34	12
Ischemic heart disease	0.3	11
Burns	0.2	10
Eye injury	0.2	8
Chest pain	0.2	7
Multiple injury	0.2	7
Foreign body, nose	0.17	6
Rape	0.14	5
Foreign body, eye	0.1	4
Total	17.5	616

TABLE 6

Emergent and Nonemergent Diagnoses Examples

Diagnoses	No. of Cases	Time Spent in ER (min.)
Asthma	167	69
Abdominal pain, cramps, spasms	29	86
Upper respiratory infection	281	56
Uncomplicated hypertension	10	104

seeking care in emergency departments other than that of the initial visit. One such case was found. The total of those obtaining revisits represents 18.5 percent of the total case load.

A breakdown of the amount of time patients spent in the emergency department also was done—48 percent spent more than one hour, 28 percent spent more than one and a half hours, 17 percent spent over two hours, and 6 percent spent over three hours. A comparison was attempted to determine the average time spent for nonemergent and truly emergent diagnoses. An example of two emergent and two nonemergent diagnoses are presented in Table 6.

Finally, all the cases have been reviewed for quality of care. They have been screened by a nurse coordinator, and then questioned cases additionally have been reviewed by a physician who has made the final determination of the acceptability of the care rendered. These results are presented in Table 3. As can be seen, the findings for questionable quality of care varied between hospitals from a low of 9.0 percent to a high 24.8 percent that were of questionable quality.

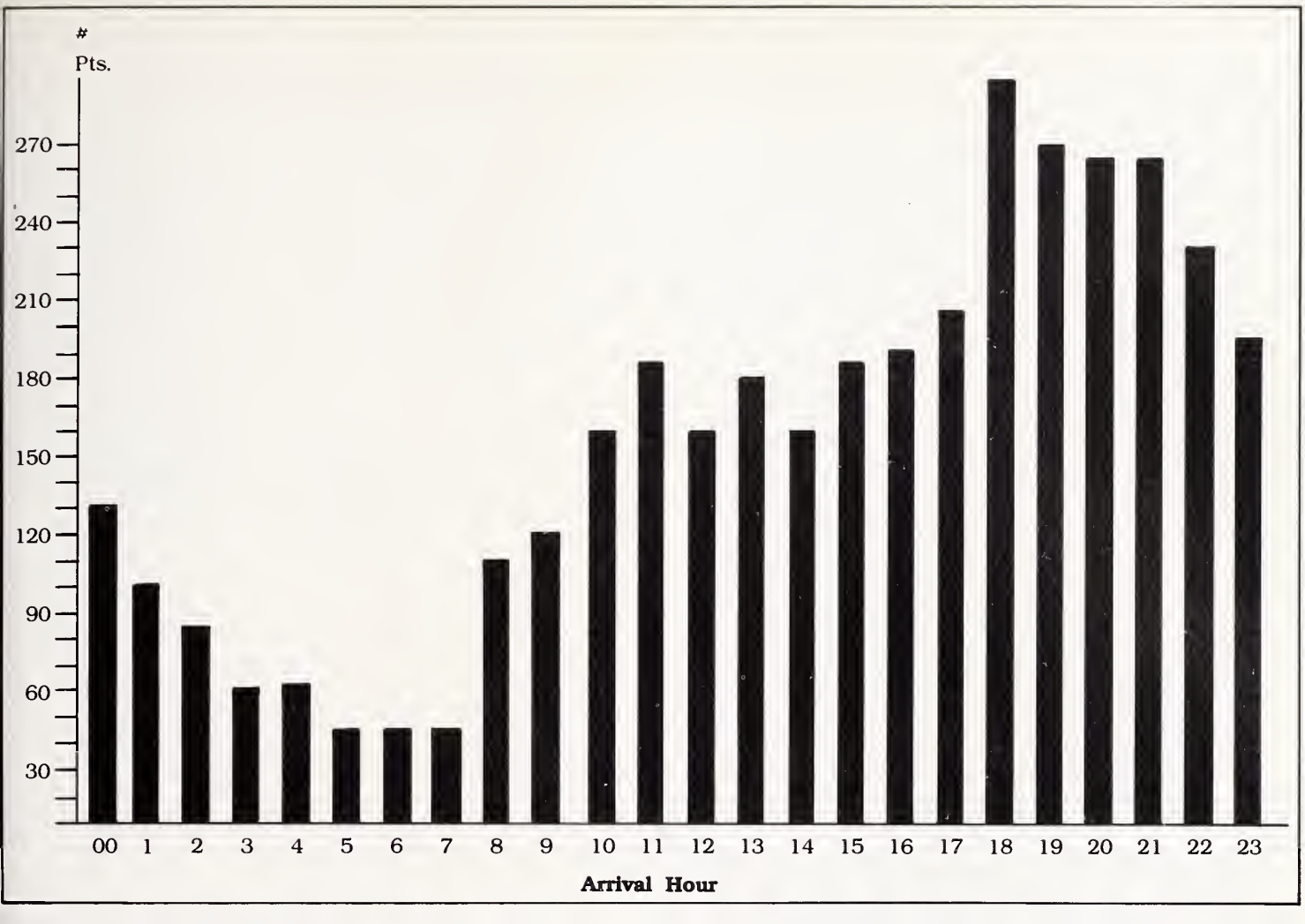
A breakdown of the case load by the emergency department physician's final impression reveals that the emergency physician is treating a very broad range of illnesses and accidents. The diagnostic impressions accounting for 70 percent of the total case load are presented in Table 4.

The final diagnostic impressions recorded by the emergency department physicians have been reviewed by a panel of physicians and Passaic Valley PSRO staff, as indicated previously, and these impressions have been divided into two categories: nonemergent and emergent. Table 4 indicates the impressions in the emergent category. Among the final impressions considered as nonemergent are: upper respiratory infection, menstrual cramps, prenatal and postoperative visits, skin rashes, and high blood pressure. Seventy percent of the case load are in the nonemergent group and 30 percent in the emergent.

Because of the wide range of diagnoses and the high proportion of colds, tonsillitis, and bronchitis found in the diagnostic breakdown, an effort has been made to determine the percentage of pediatric cases in the overall case load. The number of cases 12 years old or younger was 43 percent.

DISCUSSION

On the basis of the data gathered, the present system of emergency medical care for the Medicaid patient is providing care for a high proportion of nonemergent illnesses. It is providing such care at a pedestrian pace as judged by the duration of emergency room stay by final impression. The emergency department and its physician and nursing staffs do not deal in final impressions, but in presenting problems and at least 30



Figure—Arrival times in the emergency department.

percent of the case load are true emergencies requiring prompt attention.

The data from this study indicate that there are approximately 70 percent of this case load that are nonemergent—for the three-month period represented in this study, this represents 3.144 cases. This volume of nonemergent cases influences unfavorably the length of time available to the emergency department for the treatment of truly emergent cases.

The volume of these cases may cause delays in examination and treatment for the individual potentially emergent patient (17 percent over two hours). This is applicable to both the truly emergent as well as the nonemergent, unless the patient is dramatically and demonstrably in a dire state of illness.

Providing primary care through the emergency department also is a very expensive proposition. The case load reviewed represents an expenditure of at least $330,855, based on $54/visit. Considering just that percentage treated for upper respiratory infections, the cost was $21,825.

This present practice, if allowed to continue, has the potential for resulting in paralysis of the emergency treatment centers with resultant patient morbidity and mortality for those with truly emergent problems.

When the vital element of patient care is added to the factor of a high expenditure of scarce health dollars, the need for a better system seems apparent, particularly since the emergency department does not provide followup care.

The purpose of this paper is to outline the results of a method to provide an accurate survey of the Medicaid case load in one area's emergency treatment centers—something that, heretofore, has been completely lacking. Many in the medical and hospital administration professions long have suspected the facts reported in this paper. However, no one has been able to carry out this detailed type of survey. Having carried out this survey, it is Passaic Valley PSRO's intent to develop its survey techniques further and to carry out analyses in terms of laboratory tests and x-rays ordered, as well as to develop methods by which the appropriateness of tests ordered and treatments given can be evaluated in terms of both the presenting patient problem as well as the final impression.

The results of this limited survey indicate the existence of a significant problem in the utilization of emergency health care and tend to define sharply that problem. In truth, it defines two problems: the first is the provision of primary care for the Medicaid case load through the emergency department instead of a primary care center; the second is the potential deleterious effect that this practice may have on the delivery of emergency care.

An alternative health care delivery system for the Medicaid patients' primary care needs seems necessary. Many tentative solutions readily suggest themselves—higher reimbursement for physician office visits, establishment of more readily available walk-in clinics, and a clinic open 24 hours a day. All require the input of administrators, health insurance experts, and physicians through their medical societies.

With this survey and its facts in hand, the need appears to have been established and a method has been provided for measuring the effectiveness of the solution developed.

Change in current perceptions and usage of emergency departments is a politically sensitive issue as well as a medical concern. However, these statistics indicate a need for an alteration of both the lay perception of emergency departments and a reconsideration of their role by the medical profession and hospital administrators.

SUMMARY

A method of evaluating the care rendered in emergency departments has been developed by the Passaic Valley PSRO in response to a need by the New Jersey Medicaid Agency for data on such treatment. The portion of the survey reported in this paper encompasses three months and involves the Medicaid case load in four of the seven hospitals in the Passaic Valley PSRO area.

In this period of time, 4,419 cases were treated, of which approximately 30 percent had a final impression recorded by the emergency department physician that was considered by an independent panel of physicians to be truly emergent. The average waiting time for all patients was approximately 76 minutes with 17 percent waiting more that two hours. The broad spectrum of final impressions, and the existence of a high proportion (39%) of pediatric cases give a strong impression that the emergency departments are being used as a primary care source by the Medicaid-covered population. The belief that this is attributable to physicians using the emergency department for coverage seems unfounded since 32 percent of the case load presented between 9:00 A.M. and 5:00 P.M., while 34 percent presented between 5:00 P.M. and 10:00 P.M.

This method allows for physician evaluation of the care rendered and the results of this evaluation showed a rate of between 10 to 20 percent where definite question as to the quality of care existed. Also, there was 18.5 percent of revisits noted.

The method developed has raised some preliminary questions about some of the emergency care rendered because of potentials for interference of nonemergent case treatment with the urgent treatment required for emergency cases. Above all else, this method casts sharp focus on the expenditure of scarce health dollars in an inappropriate fashion. In the Committee's opinion, it also provides a means to evaluate the effectiveness of any solutions that are developed.

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Antepartum Diagnosis: Biopsy and Culture of First Trimester Chorionic Villi

Molly S. Chatterjee, M.D., Jahir Sama, M.D., Rina Schmidt, M.D., Newark*

Culture of chorionic villi for prenatal diagnosis has been performed prior to termination of pregnancy under a research protocol. Investigators are cautioned to complete phase I before adopting it on patients willing to continue pregnancy (phase II).

Antepartum diagnosis by culture and analysis of trophoblast cells obtained by transcervical biopsy in early pregnancy is an important new development in maternal-fetal medicine. Biopsy of chorionic villi historically was practiced in China as a blind procedure.[1] The procedure was carried out under ultrasonic or embryoscopic guidance in Russia.[2] Recently, great interest has been noted in this field in the United States, Europe, and England. An international registry has been established by Doctors Bruno Brambati of Milan, Italy, and Laird Jackson of Jefferson University in Philadelphia, Pennsylvania, to start the procedure on a research protocol basis. Until data are available for the safety and complications of the procedure, it should be done only under a research protocol. At the University of Medicine and Dentistry of New Jersey-New Jersey Medical School, we started performing chorionic villi biopsy (CVS) since 1982 under the guidance of a research protocol on patients undergoing termination of pregnancy (TOP).

MATERIALS AND METHODS

Seventeen patients who had requested voluntary abortion at University Hospital of the New Jersey Medical School, Newark, agreed to submit to chorion biopsy immediately prior to the actual evacuation of the uterine cavity.

Under ultrasound guidance (3.5 MHZ, ATL, Sector) with moderately filled urinary bladder using Portex catheter (18 X 15 mm) or by hysteroscopic guidance with biopsy forceps, chorion frondosum was biopsied and placed in Hank's medium. The material was dissected under an inverse microscope and subjected to both "direct" cytogenetic analysis and culture. The procedure was carried out in patients prior to abortion according to a research protocol approved by the research committee of UMDNJ-New Jersey Medical School, Newark.

RESULTS

The results are presented in the Table. Diagnosis of sex was made in all cases. Culture report was obtained in two weeks. We are presenting data on 17 patients who had CVS prior to abortion between eight and ten weeks' gestation. Hysteroscopy was used for biopsy in the first 6 cases. In the last 11 cases, biopsy was obtained by Portex catheter under sector scanner guidance. To obtain adequate amount of tissue, biopsy had to be repeated on two occasions. Two specimens accidentally were frozen during transportation. There were no complications due to the procedure itself. At-

*Drs. Chatterjee and Sama are from the Department of Obstetrics and Gynecology, UMDNJ-New Jersey Medical School, Newark, and Dr. Schmidt is from the Department of Cytogenetics, Metpath Laboratory. Correspondence may be addressed to Dr. Chatterjee, UMDNJ-New Jersey Medical School, 100 Bergen Street, Newark, NJ 07103.

tending and resident staff members performed the abortion procedure under direct ultrasound visualization until emptying the uterine cavity, thereby minimizing the risk of perforation.

As shown in the Table, normal karyotype was obtained in 16 cases who were at no risk for any genetic problems. A patient referred to us for termination of pregnancy due to hemophilia carrier state and having a son with hemophilia was found to have a small fetus (case 7). In one of the 17 cases where the patient was 37 years old, the karyotype revealed a trisomy 21 (case 12).[6]

TABLE

UMDNJ'S Experiences with Sampling of Chorionic Villi

Case	GA at Sampling (weeks)	Diagnosis
1-6	8-10	Normal karyotype
7	10	Male, fetus, normal karyotype
8-11	8-9	Normal karyotype
12	9	Trisomy
13-14	8-10	Normal karyotype
15-17	8-10	Normal karyotype

DISCUSSION

Tay Sach's disease,[5] hemoglobinopathies,[3,4] triploidy, and trisomy 21[6,7] have been diagnosed by chorionic villus culture and analysis. Twin gestations have been sampled three times in Europe and once in the United States.

CVS is accurate for the diagnosis of fetal sex. In the event of an abnormal fetus, the procedure permits early counselling and termination of pregnancy which will carry less risk and less emotional trauma to the mother than a saline abortion at 18 to 20 weeks.

The results of CVS studies have been compared to those obtained after midtrimester amniocentesis in pregnancies[2] and identical results have been obtained.

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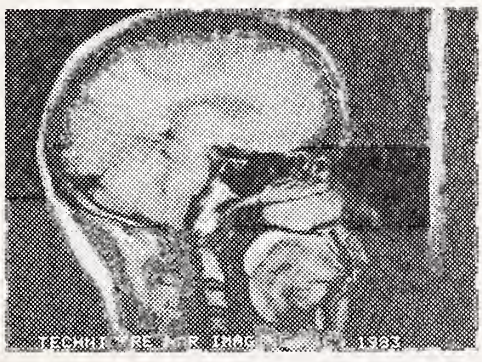
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Case Report: Henoch-Schönlein Purpura in Pregnancy

Robert R. Siroty, M.D., Dover*

Henoch-Schönlein (allergic) purpura is a common disorder of children. Its occurrence in pregnancy has not been reported previously. Our patient developed skin eruption and abdominal pain, prior to spontaneous abortion.

A 29-year-old female visited her physician in week 18 of her first pregnancy. She complained of a skin rash for one day which followed an upper respiratory tract infection and joint pain for several days. Physical examination revealed purpura, primarily on the lower extremities and buttocks. The lesions were violaceous, flat, and typical of Henoch-Schönlein purpura (Figures 1 and 2). There was no palpable hepatosplenomegaly. Her wrists and knees were swollen and warm, but not red; her ankles were tender. The uterus was enlarged, almost to the level of the umbilicus, and compatible with 18 weeks' gestation.

The hemogram and platelet count were normal. Urinalysis revealed a trace of occult blood. Tests for antinuclear antibodies and for rheumatoid factor were negative. Prothrombin and partial thromboplastin times were normal.

On the basis of the clinical appearance, the normal hematologic studies, the typical skin eruption and arthritis, and the negative studies for rheumatoid arthritis, a tentative diagnosis of Henoch-Schönlein purpura was made.

The patient was treated with penicillin G, 400,000 units four times daily, for ten days. Prednisone was not given. Three days later, the joint swelling and tenderness disappeared. The rash was more violaceous and the patient complained of abdominal pain. Some of the lesions had become confluent and necrotic, but the joint findings were minimal. The patient had no other symptoms and no vaginal bleeding. Urinalysis no longer gave a positive test for blood.

Because of discomfort, acetominophen and codeine sulfate were given and penicillin was continued. Her obstetrician found no specific abdominal abnormalities. Two days later, the abdominal pain became more severe; the next day she delivered a four-month male fetus and placenta.

At the time of the spontaneous abortion, the hemogram, platelet count, and coagulation profile were normal. Physical examination revealed faded purpura on the lower extremities without joint abnormalities. The abdomen was slightly tender.

Pathologic examination of the placenta and cord showed evidence of immaturity only, without evidence of a hematologic disorder. Examination of the fetus showed evidence of immaturity. There were no pathologic findings consistent with Henoch-Schönlein purpura.[5]

After an uneventful hospital course, the patient was discharged to outpatient care, where she had the complete disappearance of signs and symptoms of Henoch-Schönlein purpura. Two years later, she had a second spontaneous abortion at 14 weeks' gestation, without

*From the Department of Medicine, Division of Hematology, Dover General Hospital and Medical Center. Correspondence may be addressed to Dr. Siroty, Dover General Hospital and Medical Center, Dover, NJ 07801.

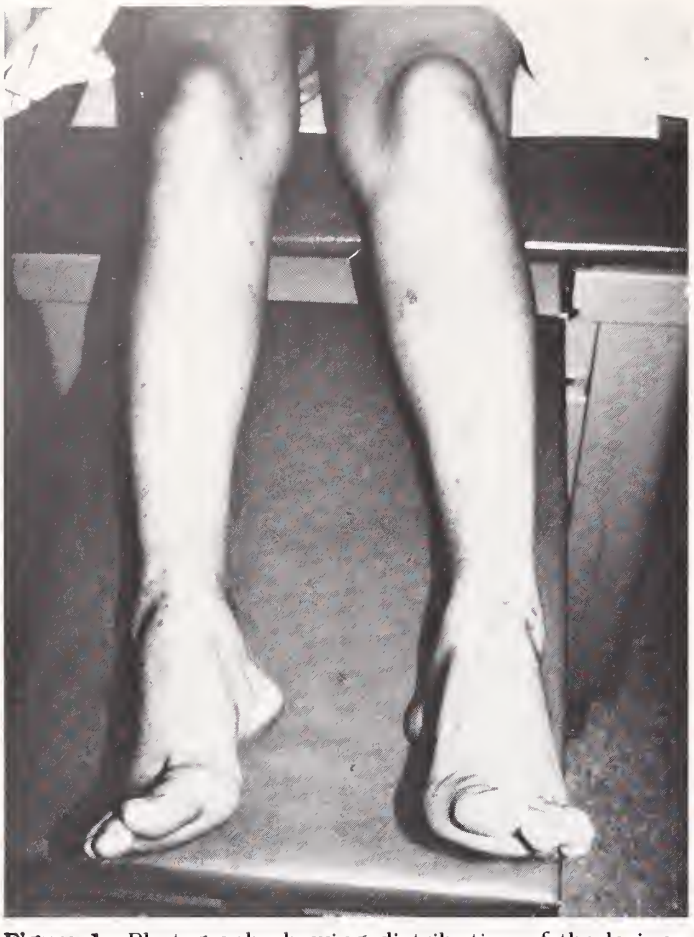


Figure 1—Photograph showing distribution of the lesions.



Figure 2—Lesion showing typical necrosis in Henoch-Schönlein purpura.

evidence of Henoch-Schönlein purpura. She subsequently delivered a normal female infant at term without complications.

DISCUSSION

Henoch-Schönlein purpura is diagnosed by the characteristic appearance and distribution of purpuric lesions, which are confined mainly to the buttocks and lower extremities. These lesions are accompanied by painful, swollen, and tender joints, and possibly may be followed by transient abdominal pain. The order of symptoms may be reversed.

Cream et al.[1] described 77 adult patients with Henoch-Schönlein purpura in whom specific symptoms were lacking at the onset. Rash appeared first in 36 patients; gastrointestinal and abdominal involvement occurred first in 6 patients; and joints were initially involved in 3 patients. In addition to the skin, pulmonary problems were reported and 3 patients developed chronic renal disease. None of the 77 patients was pregnant.

The significance of the abdominal pain in our patient may have been misinterpreted by the internist and the obstetrician, as being part of the symptom complex of Henoch-Schönlein purpura when the pain actually may have represented early labor. Whether recognition of this situation would have resulted in a different outcome is questionable.

Treatment with penicillin has been recommended when renal involvement is present, because many episodes of Henoch-Schönlein purpura are preceded by streptococcal infection, and may be confused with glomerulonephritis.[2] Corticosteroid therapy was considered, but was not given because of its lack of specificity and lack of definitive evidence of efficacy.[3] Cream et al. report the use of steroids with no uniform patterns of improvement.[1] However, in view of the outcome of the pregnancy in the present case and the fact that the patient was in the early stages of the middle trimester, reconsideration might be in order.

Of 260 pregnant women who received pharmacologic doses of steroids, Bongiovanni and McPadden reported two infants born with cleft palates. However, both patients had been exposed to steroids before 14 weeks' gestation.[3] The same authors identify one infant born with transient adrenal insufficiency after maternal exposure to steroids. Adrenal hemorrhage was reported by Oppenheimer in the offspring of a woman who had received large doses of steroids during pregnancy.[4] Kenney et al. found that treatment of pregnant mothers with pharmacologic doses of corticosteroids did not suppress the cortisol production of their newborn infants.[3]

CONCLUSIONS

The lack of specific pathologic findings might indicate that the appearance of Henoch-Schönlein purpura in the pregnant woman was not the cause of the spontaneous abortion. However, we emphasize the occurrence of this entity during pregnancy and point out the additional difficulties encountered in managing such a patient and her pregnancy. The patient had a normal first trimester and aborted during the purpuric episode.

Should consideration be given to the use of corticosteroids however nonspecific, in this unusual appearance of Henoch-Schönlein purpura when the stage of pregnancy permits?

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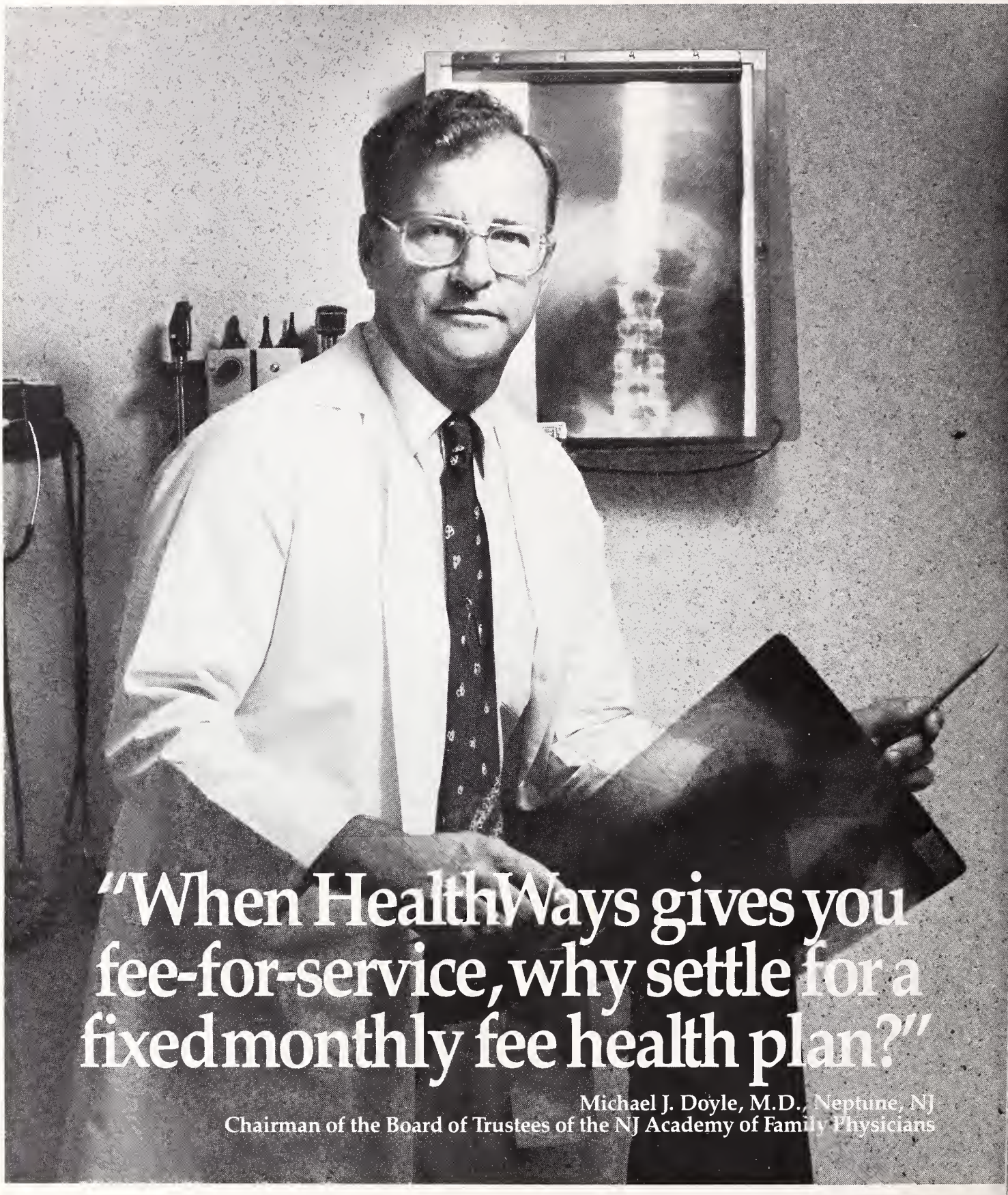
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DOCTORS' NOTEBOOK

UMDNJ Notes; AMNJ Report; Physicians Seeking Location in New Jersey

UMDNJ Notes

Stanley S. Bergen, Jr., M.D.
President

As a young and vigorous institution, UMDNJ records "firsts" with heartening frequency.

The University's 12th annual commencement, held May 22 at the Garden State Arts Center in Holmdel, produced two significant firsts: the award of 42 M.D. degrees to the first class to graduate from UMDNJ-Rutgers Medical School at Camden, and the presentation of the first Distinguished Alumnus Award to Gerald S. Levey, '61, who is chairman of the department of medicine at the University of Pittsburgh School of Medicine. The award is given to an alumnus who has "achieved eminence in professional, academic, scholarly, or scientific activity."

UMDNJ's new M.D.s also included 159 from New Jersey Medical School in Newark and 105 from Rutgers Medical School at Piscataway/New Brunswick. The commencement exercises saw the award of 75 D.M.D. degrees by the New Jersey Dental School, 43 D.O.s by the School of Osteopathic Medicine, 11 Ph.D.s by the Graduate School of Biomedical Sciences, and 160 certificates by the School of Health-Related Professions for various allied health specialties.

This year UMDNJ awarded an honorary Doctor of Science degree to Robert Bruce Merrifield of Cresskill and Rockefeller University, the 1984 Nobel Prize winner in chemistry; and an honorary Doctor of Humane Letters degree to the Rev. J. Bruce Ritter, O.F.M., a native of Trenton who founded Covenant House in New York City as a shelter for runaway and homeless children subjected to the violence, drugs, and sexual exploitation of big-city streets.

Firsts are also a familiar story for Palma Formica, M.D., associate professor of clinical family medicine at UMDNJ-Rutgers Medical School. Dr. Formica was the first female trustee of the Medical Society of New Jersey and the first woman to be chairman of the board of the state organization. She is the first woman to be elected president of the medical-dental staff of St. Peter's Medical Center in New Brunswick. She may be the first woman elected to the Board of Trustees of the American Medical Association. Win or lose, she is the first female candidate for AMA trustee.

A new feeling of pride in UMDNJ was evident as the New Jersey Medical School's pioneering Class of 1960 celebrated its 25th Anniversary Reunion in May. Of the 65 living graduates of the first class to graduate from the former Seton Hall College of Medicine, 42 returned for the reunion from places as distant as California, New Mexico, Texas, and Florida. Silver certificates were presented to 1960 class members by Assemblyman Walter M.D. Kern.

For their roles in supporting the development of UMDNJ-New Jersey Medical School as a state institution, Governor Thomas Kean and four living ex-governors—Brendan Byrne, William Cahill, Richard Hughes, and Robert Meyner—were made honorary members of the Medical Alumni Association.

AMNJ Report

The Academy of Medicine of New Jersey honored Stanley S. Bergen, Jr., M.D., of Englewood and Mary Mulholland of Morristown, Director of the Development Department at Dover General Hospital at the Annual Awards Dinner. Stanley S. Bergen, Jr., M.D., President, University of Medicine and Dentistry of New Jersey (UMDNJ) received the Edward J. Ill Award. The award, named after the Academy's first president, is given to a "New Jersey physician for dedication and extraordinary service to the profession and to the citizens of the state."

Dr. Bergen is best known as President of UMDNJ and for his contributions to medical education; however he has had a profound effect on medicine in many areas. Under his dynamic leadership UMDNJ has experienced tremendous growth. He is prominent as an active spokesman on many of today's major health-related issues including the new economics of health care, medical ethics, and the proliferation of academic/industrial partnerships in the field of biotechnology.

The Academy's 1985 Citizen's Award will be presented to Mary Mulholland, as "a citizen of New Jersey who has contributed in an outstanding fashion to the solution of health and health care problems in our state." Mrs. Mulholland is best known as founder of the "Dope Open" Golf and Tennis Classic. Her fundraising efforts have realized over $400,000 for drug-related causes. She is on the boards of numerous philanthropic organizations and has demonstrated an overwhelming commitment to the health needs of the citizens of New Jersey.

The 1985-1986 officers installed at the dinner-event included Dennis Filippone, M.D., of Short Hills, president; Arthur Krosnick, M.D., of Princeton, president-elect; Anthony B. Minnefor, M.D., of Parsippany, first vice-president; Benjamin F. Rush, Jr., M.D., of Summit, second vice-president; George L. Triebenbacher, M.D., of Beach Haven, Secretary, and E. Charles Eckstein, D.M.D., of Tenafly, Treasurer.

The following Board of Trustees members were elected for a term of three years: Augustus L. Baker, Jr., M.D., Frederick B. Cohen, M.D., Armando Goracci, M.D., Gerard

Hansen, M.D., and Joseph A. Lieberman, III, M.D.

Physicians Seeking Location in New Jersey

The following physicians have written to the Executive Offices of MSNJ seeking information on possible opportunities for practice in New Jersey. The information listed below has been supplied by the physician. If you are interested in any further information concerning these physicians, we suggest you make inquiries directly to them.

ANESTHESIOLOGY—Howard Yap Ang, M.D., 2957 Decatur Ave., Apt. C-43, Bronx, NY 10458. Far Eastern University (Manila) 1976. Board eligible. Solo, partnership, group. Available.

Vasant Chheda, M.D., 950 49th St., Apt. 8K, Brooklyn, NY 11219. G.S. Medical College (India) 1978. Fee-for-service, solo, group, partnership. Available.

John James, M.D., 950 49th St., Apt. 8K, Brooklyn, NY 11219. G.S. Medical College 1978. Solo, partnership, fee-for-service, group. Available.

CARDIOLOGY—Bruce Klein, M.D., 438A Willow Turn, Mt. Laurel, NJ 08054. SUNY-Downstate 1977. Also, pediatrics. Board certified (PD). Group, HMO, hospital. Available.

DERMATOLOGY—Rami Ephraim Geffner, M.D., 1139 N. Church St., Apt. A-3, Greensboro, NC 27401. UMDNJ 1979. Group, solo, partnership. Available.

FAMILY MEDICINE—Mark T. Bright, M.D., 1718 Afton Ave., Charleston, SC 29407. Georgetown 1978. Board certified. Group or partnership. Available September 1985.

Steven Luke, M.D., 3246 Abell Ave., Baltimore, MD 21218. SUNY 1982. Board eligible. Group or HMO. Available.

Daniel Nuchovich, M.D., 1006 Bay Drive, #702, Miami Beach, FL 33141. University of Uruguay 1980. Health center, hospital, underserved area. Available.

INTERNAL MEDICINE—Diane Bruzzi, M.D., 638 Colonial Arms Rd., Union, NJ 07083. St. George University (West Indies) 1982. Board eligible. Group, partnership, clinic, nursing home. Available.

Harold B. Ehrlich, M.D., 41 Elmwood Ave., Union, NJ 07083. St. George University (West Indies) 1982. Board eligible. Group, partnership, clinic, nursing home. Available.

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Leonid Goldin, M.D., 1802 Ocean Pkwy., Apt. D2, Brooklyn, NY 11223. Kursk (USSR) 1968. Group, hospital, nursing home, institution. Available.

Frederic M. Heitzer, M.D., 3rd Ave., 160B Borden Apts., Long Branch, NJ 07740. UMDNJ 1982. Group, partnership, clinic, industry. Available.

Marvin H. Lerner, M.D., 233 E. 32 St., #4J, New York, NY 10016. Universidad Autonoma (Mexico) 1982. Board eligible. Group, partnership, solo. Available.

Z. Shamma-Othman, M.D., 533 Evergreen Ct., Bensalem, PA 19020. Baghdad University (Iraq) 1979. Group or partnership. Available.

NEUROLOGY—Jaime Lim, M.D., Summit Park East, Apt. F-1, 8201 Henry Ave., Philadelphia, PA 19128. University of the East 1980. Group or solo. Available.

Fredric M. Radoff, M.D., 7832 91 St., N., Seminole, FL 33543. UMDNJ 1976. Board certified. Available.

NUCLEAR MEDICINE—William Ganz, M.D., 7476 Ahern Ct., University City, MO 63130. Also, radiology. Hospital or group. Available.

PATHOLOGY—Adam G. Lang, M.D., 1436 Armacost Ave., Apt. 9, Los Angeles, CA 90025. Illinois 1980. Group or partnership. Available.

Janet Schneller, M.D., 174 E. 206 St., Bronx, NY 10458. NY Medical College 1979. Board eligible. Hospital based. Available August 1985.

PEDIATRICS—Meera Gupta, M.D., 57 Lawrence Dr., Berkeley Heights, NJ 07922. India 1976. Board eligible. Group, partnership, hospital. Available.

Bruce Klein, M.D., 438A Willow Turn, Mt. Laurel, NJ 08054. SUNY-Downstate 1977. Also, cardiology. Board certified. Group, HMO, hospital. Available.

Edgar Lyubling, M.D., 1401 Ocean Ave., Apt. 4H, Brooklyn, NY 11230. Moscow (USSR) 1967. Group or partnership. Available.

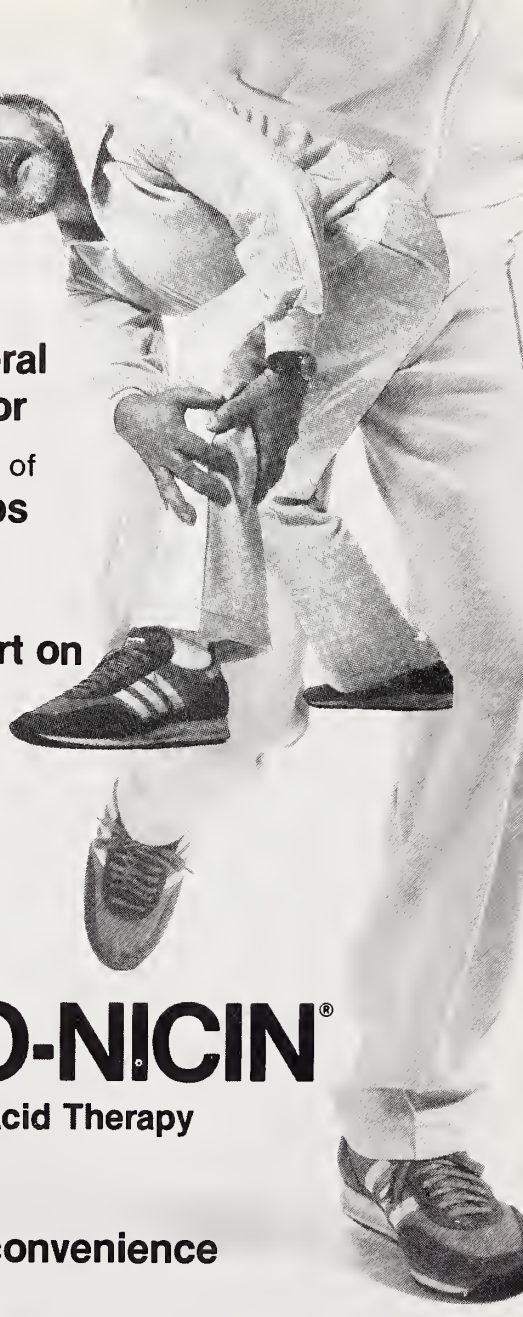
Boroumand Masood, M.D., 85-26 Van Wyck Expwy., Apt. 412, Briarwood, NY 11435. Tehran (Iran) 1968. Board certified. Group, partnership, solo, hospital. Available.

Pronoti Nigam, M.D., 24 Hart Blvd., Flemington, NJ 08822. Kanpur (India). Board eligible. Group or partnership. Available.

RADIOLOGY—William Ganz, M.D., 7476 Ahern Ct., University City, MO 63130. Also, nuclear medicine. Hospital or group. Available.

SURGERY—Dan S. Reiner, M.D., 7028 Waterman Ave., St. Louis, MO 63130. St. Louis 1980. Board eligible. Group or partnership. Available.

UROLOGY—Barry R. Shepard, M.D., 30 So. Central Ave., Valley Stream, NY 11580. SUNY 1979. Board eligible. Available.



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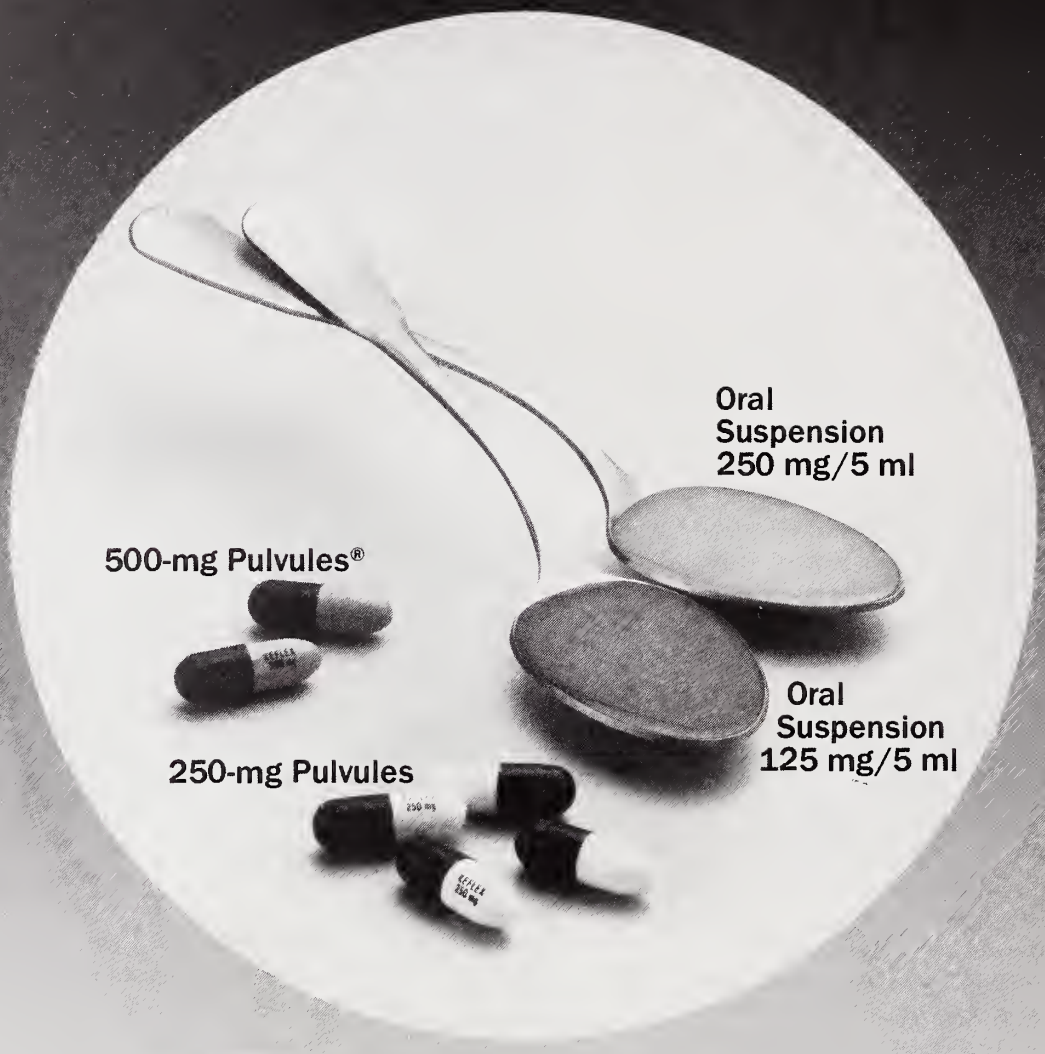
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CME CALENDAR

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This list is compiled through the cooperation of the Committee on Medical Education of the Medical Society of New Jersey, The Academy of Medicine of New Jersey, the New Jersey Chapter of the American Academy of Family Physicians, and the Office of Continuing Medical Education of the UMDNJ. For information on accreditation, please contact the sponsoring organization(s), indicated by italics—last line of each item.

MEDICINE

August

2 **Multidisciplinary Cancer Conference**
11 A.M.-12 noon—Wallkill Valley General Hospital Annex, Sussex
(Wallkill Valley General Hospital and AMNJ)

7 **Common ENT Problems**

21 **Chronic Pain**
1:30-2:30 P.M.—Rutgers Community Health Plan, 57 U.S. Hwy. 1, New Brunswick
(Rutgers Community Health Plan and AMNJ)

September

18 **Hepatitis B Virus Infection: Implications for the Health Care Professional**
1-2 P.M.—West Hudson Hospital, Kearny
(West Hudson Hospital and AMNJ)

19-20 **Advances in Pain Management**
8 A.M.-5 P.M.—Resorts International, Atlantic City
(UMDNJ-New Jersey Medical School and AMNJ)

NEUROLOGY/PSYCHIATRY

August

1 **Alcoholism and the Elderly**

8 **Compulsive Gambling**

15 **Dealing with the Denial of the Alcoholic**

29 **Diagnosis of Schizophrenia in 1985**
12 noon-1 P.M.—Carrier Foundation, Belle Mead
(Carrier Foundation)

September

5 **Biological Markers in Psychiatry**

12 **Allergies Update for the Physician**

19 **Adolescent Sexuality**
12 noon-1 P.M.—Carrier Foundation, Belle Mead
(Carrier Foundation)

17-18 **Second Annual Psychiatric Nursing Symposium**
9 A.M.-5 P.M.—Hyatt-Regency Hotel, Princeton
(Carrier Foundation and NAPPH)

SURGERY

September

10 **Expanding Arthroscopic Procedures**
8-10 P.M.—Englewood Club, 115 Palisade Ave., Englewood
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Abdominal Ultrasonography; Atlas of Aesthetic Facial Surgery; Atlas of Osteoarthritis; Basic Procedures in Family Practice; Diseases of the Nose, Throat, Ear, Head and Neck; Nutrition and Feeding of Infants and Toddlers; Teaching Atlas of Mammography; Trauma and Pregnancy

Abdominal Ultrasonography

Barry B. Goldberg (ed). New York, NY, John Wiley & Sons, 1984. Pp. 528. ($55)

This text offers the reader a clinically oriented review of abdominal ultrasonography. Well-written and informative, the book makes a valuable resource.

Its opening chapter on instrumentation is a brief update to current concepts in the field and assumes some prior knowledge of the physics of ultrasound. A chapter on abdominal anatomy is composed of fair quality gross sections. The book moves on to the discussion of the major diagnostic areas that are familiar to the ultrasonographer. In addition to chapters that review the vascular, hepatic-biliary, and gastrointestinal systems, a chapter on fluid collection is worthwhile reading. The chapter on the gastrointestinal system expands beyond the kidney to the bladder, prostate, and scrotum. A short discussion on aspiration techniques also is included.

This book is highly recommended for the physician who—after reading other texts—desires greater in-depth knowledge of the theory of abdominal ultrasound.

Neil B. Horner, M.D.

The Atlas of Aesthetic Facial Surgery

Douglas D. Dedo, M.D., (ed). New York, NY, Grune & Stratton, 1983. Pp. 312. Illustrated. ($79)

This publication is one in a series of atlases pertaining to otolaryngology and head and neck surgery. By virtue of being a comprehensive surgical atlas, it is by necessity very schematic and limited in scope. Different aesthetic facial surgical procedures are demonstrated using drawings with very little comments regarding expected results and potential complications. It seems that in the field of aesthetic facial surgery such an approach is insufficient without adequate preoperative and postoperative photographs of each procedure described. Only the chapter on rhinoplasty has some preoperative and postoperative photographs.

Because of this, the book is too schematic for a beginning facial aesthetic surgeon and, on the other hand, seems to be of little value for the more experienced one.

Robby Meijer, M.D.

Atlas of Osteoarthritis

Allen D. Meisel, M.D., and Peter G. Bullough, M.D. Philadelphia, PA, Lea & Febiger, 1984. Pp. 132. Illustrated. ($29.50)

I found this review of osteoarthritis to be very stimulating. Excellent radiographs accompanied by precise diagrams depicting the pathology help the reader to understand the subtle changes seen in various osteoarthritic joints. Exceptions to this are the two poor reproductions on page 7.18 concerning oblique views of the cervical spine.

The atlas is divided into different regions of the body with each chapter containing an abundance of beautiful tables and charts to go along with the various pathologic, clinical, and radiographic photographs. Chapters 7 and 8 of the cervical and lumbar spine particularly are well done in this regard. The script is easy to read and although not all-inclusive, gives the reader enough "meat" to go along with the pictures. A nice change of pace near the book's completion is a chapter on osteoarthritis and sports-related injuries. My only criticism is of the last chapter on treatment which is rather sketchy and not very informative.

I strongly would urge any physician dealing with musculoskeletal problems, i.e. family physician, orthopedist, rheumatologist, to purchase this book.

Sheldon D. Solomon, M.D.

Basic Procedures in Family Practice

Harry E. Mayhew, M.D., and Leroy A. Rodgers, M.D., (eds). New York, NY, John Wiley & Sons, 1984. Pp. 276. Illustrated.

Drs. Mayhew and Rodgers, nationally acclaimed family practice educators, have contributed a significant manual to the expanding literature on the practice of family medicine and primary care. Using the expertise of multiple authors they have constructed a ready reference on the performance of approximately 40 procedures commonly employed by family and other primary care physicians in the day-to-day practice of medicine. The value of using multiple authors with demonstrated competency is enhanced by a consistency of format that minimizes the possibility of this work becoming inconsistent and unreadable. Although there is some unevenness from author to author, the design of each chapter, which forces brevity, has reduced this to a minor problem.

This manual is not recommended as an all-encompassing approach to what technically can be complicated and difficult procedures. The assumption is that anyone employing this manual already has had detailed instruction and has reviewed the considerable literature on each of these procedures. With that as a background, the manual serves admirably as an instant refresher on a given procedure and should be in every family practice and primary care physician's office.

The only significant difficulty encountered with the manual is the inclusion of a relatively lengthy section on obstetrical and gynecological procedures. These procedures are too involved for this type of publication and, therefore, as presented are not nearly detailed enough to adequately cover the field even from the perspective of a "refresher." However, in spite of this criticism

the book answers the need for a publication of this sort and should go a long way toward filling that need.

Joseph A. Lieberman, III, M.D.

Diseases of the Nose, Throat, Ear, Head and Neck, 13th Edition

John Jacob Ballenger, M.D., (ed). Philadelphia, PA, Lea & Febiger, 1985. Pp. 1,432. Illustrated. ($110)

Time tested as to its usefulness and value, this 13th edition of a classic volume in otolaryngology-head and neck surgery should provide the student and the ENT resident with a definitive and comprehensive text and provide the practitioner with an authoritative reference book.

This revised edition has eight new chapters as it attempts to furnish current material on this rapidly advancing and changing medical-surgical specialty. The chapter on computerized tomography and its application in otolaryngology is current, comprehensive, and understandable and, therefore, quite practical. New sections on immunology and the uses of the laser have been added. Revisions of the sections on audiology, chemotherapy, endoscopy, and oncology have helped to make this reference work by 33 contributing authors up-to-date and consequently most helpful to the practitioner.

Ballenger has provided a comprehensive reference source of current material in the field of otolaryngology in one volume. This helps to increase accessibility and utilization of the material. Therefore, the relatively high cost of the book becomes a worthwhile investment for all those dealing with diseases of the ear, nose, throat, head, and neck.

Raymond B. Strauss, M.D., Ph.D.

Nutrition and Feeding of Infants and Toddlers

R.B. Howard, M.P.H., and H.S. Winter, M.D. Boston, MA, Little, Brown and Co., 1984. Pp. 476. Illustrated. ($39.50)

Twenty authors, mainly gastroenterologists and nutritionists, shared their expertise by writing this textbook that is timely in publication. The material is enhanced by writers knowledgeable in infant development (Brazelton), pediatric hypertension (Ingelfinger), cystic fibrosis (Schwachman), and obesity (Dietz), to name a few.

The book basically has three themes. The psychosocial aspects of infant feeding are followed by an extensive review of normal nutrition in infants and toddlers. Coverage includes detailed nutritional requirements of calories, proteins, fats, carbohydrates, and minerals. This is complemented by controversial issues including: food additives, preservatives, sodium content of baby foods, introduction of solid foods. Breast feeding versus formula feeding is treated adequately.

The next theme deals with the pathophysiology of certain diseases with emphasis on nutritional aspects of treatment. Common subjects such as infantile diarrhea, iron deficiency, obesity, and cow's milk sensitivity are covered in a clear and concise manner. More esoteric diseases discussed are short bowel syndrome, cystic fibrosis, aminoaciduria, and home care parenteral nutrition.

To complete the text, which already is laced with figures, tables, and extensive bibliography, the last section includes an appendix which is an excellent reference to topics such as food composition, therapeutic diets, drugs excreted in breast milk (very comprehensive), and community nutritional resources.

Generally speaking, this book should be received almost as well as Foman's book, *Infant Nutrition*, and is highly recommended to the pediatric community.

Frank C. Vanore, M.D.

Teaching Atlas of Mammography

Laszlo Tabar and Peter B. Dean. New York, NY, Thieme-Stratton, Inc., 1983. Pp. 222. ($78)

This monograph, co-authored by two Scandinavian physicians, is designed to teach physicians how to evaluate mammograms by utilizing both explanations and interpretations, along with 152 well-chosen case studies. Its approach to the field is well-prepared and systematic.

The book opens with a brief discussion of the anatomy of the breast. It moves next to chapters that review possible radiographic abnormalities: circumscribed lesions, stellate lesions, calcifications, and thickened skin syndrome. Emphasis is directed to the analytical approach. The case studies of these chapters focus on high-quality radiographs.

I found this a very instructive text, fulfilling its intended purpose: to assist the physician on the route to diagnosis through a step-by-step approach to the abnormal mammogram.

Neil B. Horner, M.D.

Trauma and Pregnancy

Christine E. Haycock, M.D., (ed). Littleton, MA, PSG Publishing Co., Inc., 1985. Pp. 208. Illustrated. ($25)

Doctor Haycock has obtained contributions in the form of chapters from her colleagues at University Hospital, Newark, where traumatized pregnancies probably occur more frequently and more regularly than anywhere else in New Jersey. Their vast experience has permitted them to produce a very thorough review of pregnancy complicated by trauma, covering practically every possible damage to every organ system. These experts have established protocols for evaluation and management in this compact volume and are sharing their knowledge and their experiences with any physician who may be called upon to deal with such serious problems.

There are only two minor criticisms which are not intended to detract from the value of this well-prepared concise little volume: 1) the Seldinger technique for catheter insertion into the peritoneal cavity deserves a full, detailed description with appropriate references, particularly for the physician less familiar with trauma, and 2) two chapters seemed to have escaped editorial scrutiny and contain incorrect and strange idiomatic expressions which possibly may be acceptable when spoken in certain areas but are confusing, if not ludicrous, when appearing in print.

As stated in the preface, this book is intended for any specialist who may be summoned to consult and participate in the diagnosis and management of trauma during pregnancy, and it is so recommended.

Jerome Abrams, M.D.

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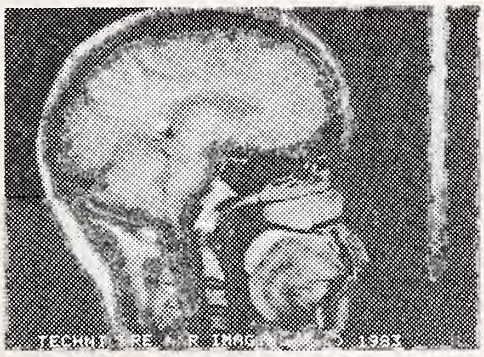
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Drs. Anuario; Beling; Catanzaro; Christian; Fischman; Gennell; Gilbertson; Harms; Henshaw; Lathrop; Moress; Morris; Palmer; Seltzer; Whitman

Dr. Charles B. Anuario

Charles Benedict Anuario, M.D., a general practitioner in Orange for many years prior to his retirement in the mid-1970s, died on January 20, 1985. Born at the turn of the century, in Orange, Dr. Anuario was graduated from George Washington University School of Medicine in the District of Columbia in 1925. He was a member of our Essex County component and a member of the American Medical Association. Dr. Anuario had been affiliated with St. Mary's Hospital, Passaic and the Hospital Center at Orange, and with East Orange General Hospital. In 1975, the Medical Society conferred on Dr. Anuario its Golden Merit Award, honoring his 50 years in medicine.

Dr. Christopher A. Beling

Christopher Abbott Beling, M.D., formerly a surgeon in Blairstown, presently living in Virginia Beach, Virginia, died on March 22, 1985. A native of New Jersey, born in 1906, Dr. Beling received his medical degree from Columbia University College of Physicians and Surgeons, in 1931. He was a member of our Essex County component, and a member of the American Medical Association. Dr. Beling was board certified in his specialty, and was a Fellow of the American College of Surgeons and of the American College of Gastroenterology. He had been affiliated with St. Vincent's and Mountainside Hospitals, Montclair; Saint Barnabas Medical Center, Livingston; and Community General Hospital, Hackettstown. In 1981, Dr. Beling was a recipient of MSNJ's Golden Merit Award, honoring his 50 years as a physician.

Dr. Charles Catanzaro

Charles Catanzaro, M.D., a retired pathologist, died on April 1, 1985, at the age of 65. Born in Norristown, Pennsylvania, Dr. Catanzaro received his medical degree from Jefferson Medical College, Philadelphia, in 1946. In the early years of his career, he had practiced in the states of Florida and Pennsylvania, until 1961 when he became a member of our Atlantic County component; he later transferred his membership to the Burlington County Medical Society. Dr. Catanzaro had been affiliated with Shore Memorial Hospital, Somers Point, and Burlington County Memorial Hospital, Mount Holly. He was board certified in his specialty.

Dr. Henry A. Christian

A member of our Hudson County component, Henry Arthur Christian, M.D., died in Monmouth Medical Center, Long Branch, on March 23, 1985, at the venerable age of 83. A native of Jersey City, Dr. Christian was graduated from Cornell University Medical School in 1927. A specialist in industrial medicine, he had been medical director for Merrill Lynch, and also had been affiliated with Consolidated Edison Company. From 1968 until his retirement in 1972, Dr. Christian had been hospital director for the Hunterdon State School serving the mentally retarded. He was a Fellow of the American College of Chest Physicians. Dr. Christian was honored with MSNJ's Golden Merit Award in 1977 in recognition of his 50 years in medicine.

Dr. Harold H. Fischman

On April 14, 1985, Harold H. Fischman, M.D., died at the venerable age of 81. A native of Newark, Dr. Fischman received his medical degree from the University of Maryland School of Medicine in 1925. He established his practice in internal medicine and cardiology in his native city, and became board certified in his specialty in 1948. He was a member of our Essex County component, and a member of the American Medical Association. He had affiliations with Newark Beth Israel Medical Center and Martland (now University Hospital, Newark). Dr. Fischman had been a clinical instructor in medicine at UMDNJ-New Jersey Medical School, Newark. He was a recipient of MSNJ's Golden Merit Award in 1975, in recognition of his 50 years of medical practice.

Dr. Ernest Gennell

A general practitioner who had retired to St. Petersburg, Florida, Ernest Gennell, M.D., died on December 24, 1984, at the remarkable age of 94. A native of Italy, Dr. Gennell earned his medical degree at the University of Pennsylvania's School of Medicine, Philadelphia, and was graduated in 1915. He established his practice in Newark and became a member of our Essex County component and of the American Medical Association. Dr. Gennell was a Fellow of the American College of Surgeons, and had been affiliated with Saint Michael's Medical Center and Columbus Hospital, both in Newark. In 1965, the Medical Society bestowed its Golden Merit Award on Dr. Gennell in honor of his 50 years of medical practice.

Dr. Robert L. Gilbertson

A retired ophthalmologist, who practiced for many years in Morristown, Robert Laird Gilbertson, M.D., died on April 13, 1985. Born at the turn of the century in Canada, Dr. Gilbertson was graduated from the medical school at the University of Toronto, Canada, in 1923. He was a member of our Morris County component, and a member of the American Medical Association. Dr. Gilbertson had been affiliated with Morristown Memorial Hospital. In 1973, he was a recipient of MSNJ's Golden Merit Award, in recognition of his 50 years in medicine.

Dr. Charles R. Harms

A retired member of our Essex County component, Charles Richard

Harms, M.D., died on March 3, 1985. Born in 1914 in New York City, Dr. Harms completed his medical education at Yale Medical School in 1942. A family physician, Dr. Harms was affiliated with The Mountainside Hospital, Montclair. Dr. Harms was a member of the American Medical Association.

Dr. George R. Henshaw

On March 29, 1985, a family practitioner in Montclair, George Russell Henshaw, M.D., died at the venerable age of 88. Born in Uniontown, Pennsylvania, Dr. Henshaw received his medical degree from Ohio State University Medical College in 1922. A member of our Essex County component, and a member of the American Medical Association, Dr. Henshaw had affiliations with The Mountainside Hospital and Community Hospital, both in Montclair. He was a recipient of MSNJ's Golden Merit Award honoring his 50 years as a physician in 1972.

Dr. Frederic W. Lathrop

Frederic William Lathrop, M.D., a well-known pediatrician in Plainfield, died in Hillsboro Beach, Florida, on April 2, 1985. Born in 1899, in New Haven, Connecticut, Dr. Lathrop received his medical degree at Harvard Medical School in 1924. A member of our Union County component, Dr. Lathrop had been affiliated with Muhlenberg Hospital, Plainfield, until his retirement in the mid-1970s. He was board certified in his specialty, and was a Fellow of the American Academy of Pediatrics. He had been active in the Union County Medical Society, serving as secretary and president, and also had been president of Plainfield's board of health. Dr. Lathrop is survived by three sons, all of whom are medical doctors: Frederic W. Lathrop, Jr., M.D.; Richard G. Lathrop, M.D., both of whom practice in Plainfield; and Donald B. Lathrop, M.D.

Dr. Edward J. Moress

Forced to retire two years ago because of ill health, Edward Joseph Moress, M.D., died on February 9, 1985, at the age of 79. A native of New York City, Dr. Moress earned his medical degree at Cornell University Medical College in 1930. He established a practice in family medicine in Hillside and was a member of our Essex County component. Dr. Moress had been affiliated with Newark Beth Israel Medical Center. In 1980, the Medical Society conferred on Dr. Moress its Golden Merit Award in recognition of his 50 years in medicine.

Dr. Harold E. Morris

At the untimely age of 56, Harold E. Morris, M.D., died in Zurbrugg Memorial Hospital's Rancocas Valley Division, Willingboro, on April 22, 1985. A native of Bullskin Township, Pennsylvania, Dr. Morris received his medical degree at Temple University School of Medicine, Philadelphia, in 1954. A general practitioner, he established his practice in Florence. Dr. Morris was a member of our Mercer County component and of the American Medical Association. He had been affiliated with Mercer Medical Center, Trenton, and the hospital where he died.

Dr. Francis R. Palmer

We just have learned of the death on January 8, 1985, of Francis R. Palmer, M.D., a general practitioner who specialized in dermatology in Passaic until his retirement. Born in 1895 in Hungary, Dr. Palmer received his medical degree from the University of Budapest in that country, in 1919. He emigrated to the United States in the early 1920s and became a member of our Passaic County component and of the American Medical Association. Dr. Palmer had been affiliated with Beth Israel Hospital, Passaic. The Medical Society of New Jersey bestowed its Golden Merit Award upon Dr. Palmer in 1969 to honor his 50 years as a physician.

Dr. Jacob Seltzer

At the untimely age of 56, Jacob Seltzer, M.D., died on March 19, 1985, at Temple University Hospital, Philadelphia. A native of Philadelphia, Dr. Seltzer earned his medical degree at Temple University School of Medicine and was graduated in 1954. He established a practice in orthopedic surgery in Toms River, and became affiliated with Kimball Medical Center, Lakewood, and Community Memorial Hospital, Toms River. At the former facility he had served at various periods as chief of surgery and orthopedics. At the latter hospital, Dr. Seltzer had been chief of staff and of surgery. He had introduced hip replacement surgery at Kimball Medical Center. He also had been affiliated with Point Pleasant Hospital and John F. Kennedy Medical Center, Edison. Dr. Seltzer was a member of our Ocean County component. He was board certified in his specialty, and was a Fellow of the American College of Surgeons, of the American Academy of Chest Physicians, of the American Academy of Orthopedic Surgeons, and of the Latin American Society of Orthopedic Surgery and Traumatology.

Dr. Lloyd B. Whitman

A retired proctologist, living in Florida for the past 25 years, Lloyd Baldwin Whitman, M.D., died in Delray Beach, Florida, on April 6, 1985. A native of East Orange, born in 1894, Dr. Whitman received his medical degree from New York Medical College in 1916. He had been a member of our Bergen County component, and a member of the American Medical Association. In 1966, Dr. Whitman was honored with MSNJ's Golden Merit Award in recognition of his 50 years as a physician.

Style Sheet

The Journal is the official organ of the Medical Society of New Jersey. The goals of* The Journal *are educational and informational. All material published in* The Journal *is copyrighted by MSNJ.

CONTENT

The educational content of each issue appears as scientific articles, based on research, original concepts relative to epidemiology of disease, and treatment methodology; case reports based on unusual clinical experiences; review articles; clinical notes, succinct items on some aspect or new observation or technique of a case experience; and special articles, which include evaluations, policy and position papers, and reviews of nonscientific subjects. Other topics include commentary (critical narration); medical history; therapeutic drug information; pediatric briefs; nutrition update; and an opinion column. Editorials are prepared by the Editor and by guest contributors on timely and relevant subjects; editorials are the responsibility of the author. The Doctors' Notebook section contains organizational, informational, and administrative items from MSNJ and from the community. Letters to the Editor and book reviews are welcome and will be published as space permits. The principal aim in the preparation of a contribution should be relevance to diagnosis and treatment and to education of patients and professionals. Preference will be given to professional authors from New Jersey and to out-of-state lecturers who submit a suitable manuscript based on a presentation made in New Jersey.

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Submit two **manuscripts** that must be typewritten and double-spaced on 8½" by 11" paper. Statistical methods used in articles should be identified. Acknowledgements will be made only for specific preparation of an essential part of the manuscript.

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1. Goldwyn RM: Subcutaneous mastectomy. *J Med Soc NJ* 74:1050-1052, 1977.

2. Dixon WJ, Massey FJ: *Introduction to Statistical Analysis.* New York, NY, McGraw-Hill, 1969, pp. 42-48.

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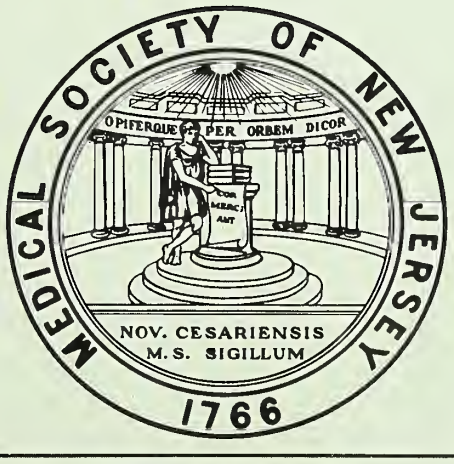
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1985 TRANSACTIONS

1985 HOUSE OF DELEGATES

MEDICAL SOCIETY OF NEW JERSEY
219TH ANNUAL MEETING
MAY 2-5, 1985







TRANSACTIONS
1985 HOUSE OF DELEGATES

1984 TRANSACTIONS

At its first session on May 2, 1985, the House of Delegates approved the Transactions of the 1984 House of Delegates as published in the July 1984 Transactions of *The Journal.*

ACTION TO LIMIT DEBATE

At its first session on May 2, 1985, the House of Delegates agreed, upon motion, that no one may speak more than once on any given subject except in rebuttal or by express permission of the House, and that floor time in each instance shall be limited to four minutes unless exception is made by the House.

REPORTS AND RESOLUTIONS

Reports and resolutions and the actions, thereon, are included under the Reference Committee to which they were assigned. The House takes action only on the resolved sections of a resolution.

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Memorial Resolution

Kenneth E. Gardner, M.D., 1903-1984

Whereas, the Almighty has chosen to call from us His loyal servant, Kenneth E. Gardner, M.D.; and

Whereas, as an Officer and Fellow of the Medical Society of New Jersey, Doctor Gardner served the members of this Society and the people of New Jersey; and

Whereas, by his example he demonstrated the attributes of a humanitarian and concerned practitioner; now therefore be it

Resolved, that the Medical Society of New Jersey expresses its sorrow at the death of Kenneth E. Gardner, M.D., and extends its sympathy to his beloved family; and be it further

Resolved, that this Resolution be spread upon the minutes of this meeting and a copy, suitably prepared, be presented to his bereaved family in heartfelt sympathy.

Received by the House with sorrowful concurrence.

Memorial Resolution

John F. Kustrup, Sr., M.D., 1907-1984

Whereas, the Almighty has chosen to call from us His loyal servant, John F. Kustrup, Sr., M.D.; and

Whereas, as a Fellow, Officer, and AMA Delegate of the Medical Society of New Jersey, Doctor Kustrup served the members of this Society and the people of New Jersey; and

Whereas, by his example he demonstrated the attributes of a humanitarian and a concerned and caring physician; now therefore be it

Resolved, that the Medical Society of New Jersey expresses its profound sorrow at the death of John F. Kustrup, Sr., M.D., and expresses its sympathy to his beloved family; and be it further

Resolved, that this Resolution be spread upon the minutes of this meeting and a copy, suitably prepared, be presented to his bereaved family in heartfelt sympathy.

Received by the House with sorrowful concurrence.

Memorial Resolution

Albert F. Moriconi, M.D., 1902-1985

Whereas, the Almighty has chosen to call from us his loyal servant, Albert F. Moriconi, M.D.; and

Whereas, by his example and life he demonstrated the attributes of citizenship, humanitarianism, and healer; and

Whereas, as an Officer and Judicial Councilor of the Medical Society of New Jersey, Doctor Moriconi served the members of this Society and the people of New Jersey; now therefore be it

Resolved, that the Medical Society of New Jersey expresses its sorrow at the death of Albert F. Moriconi, M.D., and extends its sympathy to his beloved family; and be it further

Resolved, that this Resolution be spread upon the minutes of this meeting and a copy, suitably prepared, be presented to his bereaved family in heartfelt sympathy.

Received by the House with sorrowful concurrence.

Resolution of Recognition

James S. Todd, M.D., Honorary Fellow

Whereas, James S. Todd, M.D., has served as Trustee and Chairman of the Board of Trustees of the Medical Society of New Jersey; and

Whereas, Doctor Todd so distinguished himself in those posts and as a delegate to the AMA that he was elected to the Board of Trustees of the AMA; and

Whereas, Doctor Todd was a founding member and Chairman of the Board of the New Jersey State Medical Underwriters, Inc., a nationally recognized professional liability insurance company; and

Whereas, Doctor Todd has served as President of the Physicians Insurance Association of America; and

Whereas, Doctor Todd recently has been named Senior Deputy Executive Vice-President of the AMA; and

Whereas, Doctor Todd has served as a commissioner to the Joint Commission on Accreditation of Hospitals; and

Whereas, Doctor Todd's service to the Medical Society of New Jersey and its members can only be described as the embodiment of "the pursuit of excellence"; now therefore be it

Resolved, that in recognition of these achievements the House of Delegates of the Medical Society of New Jersey proclaims and bestows upon James S. Todd, M.D., the singular title of "Honorary Fellow of the Medical Society of New Jersey."

The resolution was adopted by acclamation by the House.

Resolution of Endorsement

Palma E. Formica, M.D.

Whereas, Palma E. Formica, M.D., has served as a Trustee and Officer of the Medical Society of New Jersey; and

Whereas, Doctor Formica has served as Chairman of the Board of Trustees of the Medical Society of New Jersey and presently serves as a delegate to the American Medical Association; and

Whereas, Doctor Formica has rendered consistently outstanding and dedicated representation to the physicians of New Jersey; and

Whereas, Doctor Formica currently is a candidate for the Board of Trustees of the American Medical Association; now therefore be it

Resolved, that the House of Delegates of the Medical Society of New Jersey strongly, unanimously, and vigorously supports Palma E. Formica, M.D., as a candidate for the AMA Board of Trustees.

The resolution was adopted by acclamation by the House.

Specialty Society Representation: Board Of Trustees

Frank Y. Watson, M.D., Chairman, Montclair

Specialty Society Representation in the Medical Society of New Jersey House of Delegates. Petitions for seating in the Medical Society of New Jersey House of Delegates were received from the Vascular Society of New Jersey and the New Jersey Chapter, American Academy of Pediatrics. Applying the criteria established in the Bylaws, the following recommendations are submitted by the Board of Trustees:

1. **Vascular Society of New Jersey** (117 members; 95 percent membership in the Medical Society of New Jersey).

RECOMMENDATION: That the Vascular Society of New Jersey be granted representation in the House of Delegates.

2. **New Jersey Chapter, American Academy of Pediatrics** (590 members; 64 percent membership in the Medical Society of New Jersey).

RECOMMENDATION: That the New Jersey Chapter, American Academy of Pediatrics not be granted representation in the House of Delegates at this time, since it does not meet the Bylaw criteria.*

At the first session, the House of Delegates acted as a committee of the whole and granted representation in the House of Delegates to the Vascular Society of New Jersey.

Bylaw Criteria: a) Membership exceeding 200, or evidence that 200 physicians do not practice that specialty within New Jersey, with b) at least 80 percent belonging to the Medical Society of New Jersey.

REFERENCE COMMITTEE "A"

Reports: ***PRESIDENT/CHAIRMAN OF THE BOARD OF TRUSTEES***
JUDICIAL COUNCIL
AMA DELEGATION
EXECUTIVE DIRECTOR
COMMITTEE ON LONG-RANGE PLANNING AND DEVELOPMENT
COMMITTEE ON IMPAIRED PHYSICIANS
RESOLUTIONS #1, 2, 3, 5, 6, 10, 13, 15, 19, 20

Members:
Arthur Ginsburg, M.D., Chairman, Morris
John C. Baker, M.D., Atlantic
E. Arthur Kratzman, M.D., Union
Giovanni Lima, M.D., Essex
Jeffrey M. Solomon, M.D., Cumberland
Patricia G. Klein, M.D., Alternate, Bergen

PRESIDENT AND CHAIRMAN OF THE BOARD OF TRUSTEES

FRANK Y. WATSON, M.D., MONTCLAIR
(Reference Committee "A")

For several years the principal activity of the Medical Society of New Jersey has been dealing with government, or so it seems when one notes the large number of items on the agendas of the Board of Trustees' meetings in which the Medical Society is asking the government to do something, is opposing something the government has done, or is attempting to cope with problems arising from governmental action or inaction.

The work of the Board of Trustees during the past year has been no exception. Several items addressed by the Board follow. A considerable amount of time and effort by members of the Board of Trustees and by members of the staff of the Medical Society was required to assist members of the Medical Society in understanding these matters and in assisting the members in dealing with them.

1. Beginning July 1, 1984, the federal government froze Medicare reimbursement levels for physicans' services for a period of 15 months and created two classes of physicians, namely "participating" and "nonparticipating" physicians.

2. On or about October 15, 1984, the PRO of New Jersey notified the hospitals throughout the state that, retroactively as of October 1, 1984, PSRO review of Medicare cases would be replaced by PRO review under much more stringent criteria than were used in PSRO review. The concurrent review that was an integral part of PSRO was replaced with post facto review coupled with retroactive denial of payments for services rendered in those cases found not to meet the more stringent utilization criteria, thus placing the hospital at considerable potential financial risk.

3. TEFRA regulations mandating a new form of reimbursement for hospital-based physicians were implemented as of January 1, 1985. These regulations mandated itemized billing to Part B for all services provided personally by a physician directly to or for a particular patient.

4. Dealing with the avalanche of proposed state legislation having a potential impact in the health care field continues to be a major ongoing challenge. From the thousands of bills introduced into the legislature this year, the Council on Legislation culled several hundred on which they recommended a position and action for the Board of Trustees to consider. Among those bills are numerous ones seeking a license for or seeking to expand the license of paramedical personnel. Particularly active this year were the chiropractors, respiratory therapists, radiologic technicians, optometrists, and physicians' assistants.

5. The escalating cost of professional liability is an ongoing concern of the Board of Trustees. While the Medical-Inter Insurance Exchange of New Jersey is sound financially and has one of the most sophisticated, efficient, and cost-effective claims processing programs of any professional liability insurance company in the United States, the overall cost of professional liability insurance continues to rise due to the increasing number of claims and to the significant increases in the size of awards made by juries. This is being addressed through an intensification of the Risk Control Program conducted by MIIENJ and MSNJ and through tort reform legislation which seeks modification of the current statute of limitations, a consideration of collateral source payments in the satisfaction of an award, a provision for structured settlements in cases of permanent disability requiring long-term care, and an affidavit of a credentialed expert on behalf of a plaintiff filing a lawsuit.

6. This year we also learned that professional liability can arise from sources other than the claims of malpractice by a patient. Kevin D. Marin, the Commissioner of Insurance, in considering possible alternatives to recapture the loss experienced by the State Reinsurance Association, gave thought to assessing all physicians in the state as a convenient way to reduce the $50+ million deficit faced by the State Reinsurance Association.

7. Furthermore, the Commissioner, by equating with incompetence the settlement of a claim or loss of a case in court, simplistically reasoned that the professional liability problem could be solved by finding the "bad apples" and removing them from the barrel. Following negotiations with the Commissioner by representatives of MSNJ and MIIENJ, the Commissioner appointed a task force to study the medical malpractice deficit of the Reinsurance Association and other matters that may be contributing to the overall professional liability problem. Representatives from MSNJ and MIIENJ were appointed to the task force, the work of which still is in progress at this time.

8. The attempt by the Internal Revenue Service to reject as a business expense the payment of the subordinated loan by physicians who originally purchased professional liability coverage through MIIENJ has been challenged in court by the Medical Society. This has required ongoing monitoring by the Board of Trustees. At risk is approximately $22 million. So far, approximately $18 million have been exempted from taxation through expiration of the statute of limitations, negotiation with the Internal Revenue Service, or by a favorable ruling of the court. The status of the remaining $4 million is to be determined.

9. The resolution adopted by the 1984 House of Delegates pertaining to a study regarding the feasibility of having a collective bargaining agent for physicians' services attracted the attention of the Federal Trade Commission, which conducted an investigation of the Medical Society of New Jersey related to the potential violation of price fixing and market restraint. Only after considerable correspondence and negotiation over a six-month period did the New York office of the FTC conclude that they had found no evidence that the Medical Society had acted unlawfully and recommended that the file on our case be closed. I observe with some uneasiness that this investigation did occur in 1984.

Recognizing that the New Jersey Hospital Association and the Medical Society of New Jersey are the two principal organizations in the state primarily devoted to health care, and further recognizing that both organizations should work together as closely as possible in dealing with the health care issues within the state, their respective Boards of Trustees have continued to seek ways of constructively addressing issues of mutual concern. Your President served as an ex-officio member of the Board of Trustees of the Hospital Association, and Mr. Louis Scibetta, President of the New Jersey Hospital Association, attended the meetings of our Board of Trustees and actively participated in its deliberations. The Executive Committees of both Boards met periodically, and this year there was a joint meeting of the Boards of Trustees. Furthermore, contact between members of the staff of both organizations is occurring with increasing frequency.

While attendance at the meetings of the Board of Trustees each month by interested members of the Medical Society and participation in the deliberation of the Board by these attendees remains high, the Board encourages further attendance, particularly by the leadership of all county medical societies and all medical specialty societies. The Board feels that such attendance and participation in the deliberations of the Board is probably the single most effective means of communication between the Board of Trustees and the members at large.

The combining of the position of President and Chairman of the Board of Trustees of the Medical Society of New Jersey seems to have met the expectations of those that proposed it. The line of responsibility and accountability has been clear, and the flow of work between the President and the staff has gone smoothly. While this new arrangement has required additional preparation by the President in anticipation of presiding at the monthly meetings of the Board, I have not found this to be a burden.

For a full accounting regarding the tremendous volume, variety, and complexity of issues dealt with by the Board of Trustees, reference should be made to the summaries of the minutes of the Board of Trustees' meetings published monthly in *The Journal* of the Medical Society of New Jersey.

This report would not be complete without an acknowledgement and a very sincere thanks to the numerous members of the Society who served so diligently and effectively on the numerous councils and committees of the Medical Society and to the members of the staff whose diligent, skillful, and competent work goes largely unobserved, and yet is absolutely essential to the smooth functioning of the MSNJ.

The Reference Committee **recommends** that the report be filed, with commendation to the President.

HOUSE ACTION: Filed, with commendation to the President.

JUDICIAL COUNCIL

FREDERICK W. DURHAM, M.D., CHAIRMAN, HADDONFIELD
(Reference Committee "A")

Apart from its work as an appellate tribunal, considering matters originally handled by county judicial committees, the Judicial Council has responsibility, under the Bylaws, to supervise, direct, and keep records of all complaints dealt with by county judicial committees. However, the volume of business requiring its attention has necessitated fewer meetings this year.

From the official findings, the Council hereby presents a summary of its operations and those of judicial committees from May 5, 1984, to March 1, 1985.

By Judicial Committees

Complaints reported as disposed of	42
Alleging:	
Dissatisfaction concerning fees	20
Dissatisfaction concerning medical procedures	7
Unprofessional conduct	7
Dissatisfaction concerning professional ethics	8

By Judicial Council

Meetings held	1
Official communications acted upon	125
Appeal hearings requested	1
Appeal hearings granted	0
Formal opinions rendered	0

RESOLUTION #18—FEE DISPUTES

The 1984 House of Delegates adopted the following amended version of Resolution #18:

> Resolved, that the Medical Society of New Jersey remind all county societies that they must conform to the judicial mechanism as outlined in Judicial Council Opinion No. 29 (January 21, 1981) when dealing with excessive fee disputes; and be it further
> Resolved, that an additional protocol be established to allow review of fee complaints against physicians made to the Board of Medical Examiners when such complaints are forwarded by the respondent (defendant) physician.

All county societies are reminded that fee disputes must be processed in accordance with Opinion No. 29.

Additionally, if a member who is a defendant in a State Board of Medical Examiners' review wishes to have that situation reviewed and commented upon by his Judicial Committee, that Committee should honor his/her request.

OPINION NO. 29: OFFICIALLY ADOPTED JANUARY 21, 1981

A number of inquiries have been received by the Judicial Council regarding the appropriateness of establishing "Fee Review Committees."

The Judicial Council requested legal counsel to advise us in this regard since there are questions related to antitrust and the Federal Trade Commission.

Legal counsel has advised that questions and complaints regarding fees are specifically within the jurisdiction of the judicial mechanism of the Medical Society of New Jersey and the judicial committees of the component societies and should be treated accordingly as questions of ethics and professional conduct.

County society judicial committees should conduct themselves accordingly. They, of course, may utilize the opinions of specialists or advisory committees in reaching their determinations.

The Reference Committee **recommends** that the report be filed.

HOUSE ACTION: Filed.

AMA Delegation

William J. D'Elia, M.D., chairman, Spring Lake
(Reference Committee "A")

The AMA Delegation of the Medical Society of New Jersey is pleased to submit this annual report. Major items before the AMA House of Delegates during this past year are listed below:

1. PRO Regulation. The AMA is opposing the Administration's use of arbitrary admission and quality objectives in PROs, will monitor PRO activities, and will seek remedial legislation to correct deficiencies.

2. Hospital Medical Staff Joint Ventures. The AMA Board of Trustees will review this issue and consider the development of guidelines for use by hospital medical staffs.

3. Board Imposed Bylaws. The AMA Board of Trustees is considering entering a lawsuit in support of the medical staff of Methodist Hospital, Philadelphia, regarding unilateral changes in the medical staff bylaws.

4. Media Campaign to Enhance Physician Image. The AMA will begin a program of public education to increase public awareness that physicians are patient advocates.

5. Relative Value Scales. Adopted a resolution opposing the compulsory use of any relative value scales for determining physician fees.

6. Federal Mandate for Pluralism. Adopted a resolution that requires the Association to seek legislation to mandate employers to offer their employees various types of health service designs including traditional indemnity insurance.

There are many more actions that could be discussed, but time and space are limited. I am pleased to report that Doctor Frank Campo has been appointed to the AMA Ad Hoc Committee on Foreign Medical Graduates and that Doctor Palma E. Formica has been appointed to the AMA Council on Long-Range Planning and Development.

The Reference Committee **recommends** that the report be filed.

HOUSE ACTION: Filed.

Executive Director

Vincent A. Maressa, Lawrenceville
(Reference Committee "A")

Management of the affairs of the Society continues to be a pleasurable experience for me, although the issues confronting the membership often are irritating and distasteful. During this past year, a considerable amount of energy and resources has been spent on Medicare reimbursement and all it entails, along with the worsening professional liability situation.

The difficulties of bringing federal Medicare expenditures under control will continue to produce many misdirected and misguided solutions. Having initially underestimated the potential field of eligibles and the frequency and severity of services, the government is well on its way—through PRO—to rationing those services. There is no realistic probability of PRO being repealed or significantly altered via litigation. The course we will have to follow is meaningful adjustment and management. A concerted effort by the AMA and state societies, I believe, can produce such a result.

Professional liability continues to be a highly visible and obnoxious problem. The AMA recently has completed an exhaustive study and will be recommending a wide range of solutions. The ultimate solution, from my perspective, rests with the physician community. At this point we simply have not seen the medical community commit itself to expending the necessary effort.

Objective analysis leads one to the conclusion that there are three possible solutions: 1) reduce the frequency of negligent practice; 2) convince patients not to assert claims; 3) passage through the legislative process of meaningful tort reform.

I personally feel we must pursue all three with equal vigor. The first area is true risk prevention and becomes a quality of care issue. We know it works because anesthesiologists in New Jersey have been working at it for seven years and have produced convincing proof. While the Medical Inter-Insurance Exchange of New Jersey data produced higher rates (+24.1 percent for all other specialties in February 1985, anesthesiologists experienced not only a stabilization but a minor reduction from 1984 rates. The second area also is risk prevention through physician-patient rapport. The attitude and demeanor of the physician as perceived by the patient is as great a factor in claim production as the perception of a real or imagined negligent act. The third area is tort reform. The legislature responds to pressure. No member of the legislature is going to become an advocate of tort reform without pressure from local physicians. While the Medical Society of New Jersey and the Medical Inter Insurance Exchange of New Jersey can assist thousands of doctors must call or write the members of the Senate and Assembly to request favorable action on the bills currently pending.

All three of the above can and would produce meaningful results. All three are within the grasp of the membership. The result obtained will be related directly to the effort expended.

The Reference Committee **recommends** that the report be filed.

HOUSE ACTION: Filed, with commendation to the Executive Director.

Committee on Long-Range Planning and Development

Bernard Robins, M.D., chairman, Springfield
(Reference Committee "A")

The Committee met on October 24, 1984, and January 10, 1985. Attendance was satisfactory.

1. Procedure for Processing Physician Applications for Membership. A communication was received from the Resident Governing Council, indicating their interest in discussing with the Committee the formation of a resident physician section at the state level, similar to the medical student section.

The Council was concerned with the length of time it takes for a resident to become a member of the county and state societies after making application for membership at the county level. It was pointed out that a delay of from 6 to 12 months in the process is not uncommon. To expedite the procedure for the applicant, it was suggested by the Council that the application be processed at the state level.

In its discussion, the Committee considered the possibility of processing the application for membership at MSNJ and the concept of placing residents in the category of provisional members pending acceptance at the county level.

It has been estimated that approximately 80 percent of residents who become members of a medical society retain membership in the organization on completion of their residencies. Therefore, the Committee believes it would be advantageous to the county societies if the credentialing process was expedited, as it would result in increased memberships. It was emphasized, however, that the interview process should be continued at the county level.

There are approximately 3,000 resident physicians in New Jersey, 1,050 of whom are members of the AMA, but only 120 are members of the Medical Society of New Jersey. It was felt that the potential resident physician membership would be enhanced if a more expeditious application procedure was developed.

The following recommendations of the Committee on Long-Range Planning and Development were approved by the Board of Trustees on November 18, 1984: 1) That resident physician applications for provisional membership be processed at the state level. (The interview portion of the credentialing process is to be completed at the county level.); 2) That simultaneously with the application to the state for provisional membership, an application for membership also is to be submitted to the county society; 3) That after satisfactory completion of the application at the state level, a resident physician shall be admitted as a provisional member for a period up to six months, with the proviso that within the six-month period he or she must become a member of the county society in order to reach full member status at the state level; and 4) That county societies be urged to expedite the credentialing process.

The recommendations are being referred to the Committee on Revision of Constitution and Bylaws for processing of an appropriate amendment to the Bylaws.

The recommendation of the Committee on Long-Range Planning and Development that there be a standard dues assessment of $20 for resident physicians at the county level was disapproved as the Board of Trustees was of the opinion that the dues assessment should be left to the discretion of the county societies.

2. Review of MSNJ's Councils and Committees. Overall, the Committee agreed that the Society's council and committee structure is an efficient organizational format.

One major point with reference to the Society's councils and committees, relating to member benefits and endorsed programs, was brought to the Committee's attention.

It was pointed out that the goal of having Society-endorsed programs is to provide members with high-quality goods and services at the lowest cost available, while generally producing royalty income, i.e., the selling of the goodwill and name of the Society in endorsing a product or service.

Currently, the Society's non-dues income is $721,000, which translates to 26 percent of the operating budget. Of that amount, $110,000 is derived from endorsed programs. Staff believes the consistent and comprehensive management of this area would produce a stabilization of dues while avoiding a curtailment of services.

The Committee on Long-Range Planning and Development recognized that limitations will have to be set as to what items will be acceptable. In particular, it was felt that, for ethical and legal reasons, medical practice items should be excluded. The competitive aspect also will have to be taken into consideration. The Committee is aware that in certain instances decisions will have to be made as to whether the proposed offering is a unique item, or one that should be open to competitive bidding. All programs will require the approval of the Board of Trustees.

The following recommendations were approved by the Board of Trustees at their February 1985 meeting: 1) That the name of the Committee on Medical Defense and Insurance be changed to the Committee on Membership Services; and 2) That the Committee on Membership Services be responsible for monitoring and reporting on all endorsed programs of the Society (which currently include the physician insurance programs, Legal Services Plan, and I. C. System, Inc.), for screening all new offerings of products or services proposed as Society-endorsed membership benefit programs, and for making recommendations on these items to the Board of Trustees.

Criteria for evaluating programs for MSNJ sponsorship include:

1) The program must offer goods or services needed by physicians in the practice of their profession and the management of their practices.

2) The goods and services must be of the highest quality and must be priced through the Society at

rates lower than those generally available through market sources.

3) No program shall be offered which competes with the professional medical services of any member.

4) One or more suppliers of the goods and services are to be studied for feasibility and desirability.

5) The Committee on Membership Services should conduct ongoing review of all programs. All endorsed programs must be evaluated at least annually.

3. Monitoring of Current Medical Society of New Jersey Positions. It was agreed that when a standing position of the Society is perceived as generating a negative image, it would be appropriate for the Committee on Long-Range Planning and Development to recommend that the position be revised in a positive way.

4. DRG Position. The Committee discussed the Society's present position on DRGs: "The Society is opposed to the concept of DRG methodology and will assume a leadership role in coordinating opposition to DRGs and in supplying data to the legislature.

The Committee observed that no documented data are available at the present time to substantiate the Society's objections to the program.

Since DRGs now are a fact of life, it was felt that perhaps the Society should assume a more positive image, but, at the same time, maintain the integrity of its position.

The Board referred the question of the current position on DRGs to the Ad Hoc Committee on Presentation of MSNJ DRG Position for consideration and report back to the Board of Trustees in March.

The Reference Committee noted that many of the recommendations of the Committee on Long-Range Planning and Development have received serious consideration and implementation by the Board of Trustees, indicating a process of careful thought and deliberation.

The Reference Committee **recommends** that the report be filed.

HOUSE ACTION: Filed.

Committee On Impaired Physicians

Boris G. Ivovich, M.D., chairman, Clinton
(Reference Committee "A")

The Impaired Physicians Program of the Medical Society of New Jersey has continued to grow in both the numbers of physicians referred as well as in national recognition and prestige. The following are some of the highlights of the past year:

1. The Sixth AMA Meeting on the Impaired Physician. In recognition of the New Jersey leadership in the field, the AMA selected New Jersey as the site of the 6th national meeting on the impaired physician. The main agenda involved a comparison of the programs in California, Georgia, and New Jersey. The participants left with a heightened awareness of the enlightened stance of MSNJ in contributing to the support of the New Jersey program which provides an excellent model for other states to replicate.

2. Treatment Protocols. The Committee has devoted considerable time to the development of protocols for the management of: a) physicians alleged to be neurologically impaired or senile and no longer competent practitioners; b) physicians with physical disabilities that produce impairment of professional performance; and c) physicians accused of sexual misconduct.

3. Treatment Loan Fund. Increased efforts have been made to expand the fund in order to be able to assist our "fallen comrades" in meeting the costs of their rehabilitation. An ad and article in *The Journal* met with very limited success. Interest on advanced grant funds has netted several thousand dollars for this fund. Further fundraising efforts are planned.

4. Auxiliary Involvement. An increased role of the Auxiliaries in case detection, family involvement, and fundraising for the Treatment Loan Fund has been fostered. A joint educational and fundraising conference on the "Medical Family: Its Strengths, Its Weaknesses and Insuring Its Survival" is being cosponsored by the Auxiliaries of MSNJ and NJAOPS with the Impaired Physicians Program.

5. State Board of Medical Examiners. Improved liaison between the State Board of Medical Examiners and the Impaired Physicians Program has become a reality. A breakfast meeting this fall opened new avenues of dialogue and may culminate in a formal educational program for all the professional licensing boards.

6. Statistical Summary—September 7, 1982, to December 31, 1984. Our activities best are illustrated by the following statistics on the program activities for the last year:

Total Cases			
Old Cases (prior to 12/31/83)	129		
1984 Cases	69		
	198		
M.D.	169		
D.O.	19		
D.V.M.	4		
Student	3		
Other	3		
	198		
Male	188		
Female	10		
	198		
Impairment (primary illness)			
Alcohol alone	56		
Alcohol/drugs	14		
Alcohol/psychiatric	3		
Subtotal	73	36.9%	
Drugs alone	41		
Drugs/alcohol	17		
Drugs/psychiatric	5		
Subtotal	63	31.8%	
Psychiatric alone	34		
Psychiatric/alcohol	5		
Psychiatric/drugs	4		
Subtotal	43	21.7%	
Senility	9		
Physical	9		
Other	1		
Subtotal	19	9.6%	
Total		100.0%	
Hospitalized			
Detox/rehab	47		
Psychiatric	14		
Present Practice Status			
In active practice	141	71.2%	80.3%
Seeking employment	18	9.1%	
Disabled/retired	16	8.1%	
License suspended/ revoked/retired	11	5.6%	
Unable to locate	8	4.0%	
Deceased	4	2.0%	
		100.0%	

The Reference Committee **recommends** that the report be filed.

HOUSE ACTION: Filed.

RESOLUTION #1

Introduced by: **Bergen County Medical Society**
Subject: **Conflict of Interest**
Referred to: **Reference Committee "A"**

Whereas, there are many systems to be used by physicians to deliver health care; and

Whereas, the traditional method of practice for most New Jersey physicians has been private practice; and

Whereas, the official position of the Medical Society of New Jersey is to support a pluralistic approach to the delivery of medical services without advancing one form over another; and

Whereas, various past and present officers, committee and council members, and representatives of the Society actively have advertised for various alternative methods of health care delivery; now therefore be it

Resolved, that officers, representatives, and council and committee members of the Medical Society of New Jersey actively shall not advertise any system of health care delivery or insurance coverage not approved officially by the Society; and be it further

Resolved, that any individual violating the above resolved is guilty of a conflict of interest and immediately must vacate any elective or appointive position within the Society.

Resolution #1 was considered with Resolution #3. The Reference Committee felt a physician could not be precluded from advertising a particular type of health care delivery system or insurance coverage and stating his or her past or present affiliation with the Medical Society of New Jersey.

The Reference Committee **recommends** that the following Substitute Resolution rather than Resolutions #1 and #3 be adopted.

Resolved, that when members of MSNJ advertise any system of health care delivery or fiscal intermediary and state their present or past affiliation with MSNJ, that such advertisement should include a disclaimer that this is not an endorsement by MSNJ.

HOUSE ACTION: Not adopted. Resolution #1 was rejected.

RESOLUTION #2

Introduced by: **Bergen County Medical Society**
Subject: **Quality of Care**
Referred to: **Reference Committee "A"**

Whereas, the stipulated purpose of the PRO component of the recent Medicare amendments is to contain costs; and

Whereas, the AMA actively is opposed to the arbitrary admission and quality objectives in the activities of PROs; and

Whereas, the Medical Society of New Jersey House of Delegates previously has taken a position opposing government-mandated peer review; now therefore be it

Resolved, that the Medical Society of New Jersey advise the Society membership that it is inappropriate to be in the employ of the PRO while active within Medical Society of New Jersey offices, councils, committees, and representative positions.

This Resolution generated much discussion, with very cogent arguments advanced. The Reference Committee was advised by the President that the Board of Trustees presently is working on a policy to encompass the entire conflict of interest issue.

The Reference Committee **recommends** that Resolution #2 be referred to the Board of Trustees with the request that a report be made to the entire membership as soon as the conflict of interest policy is formulated.

HOUSE ACTION: Adopted.

RESOLUTION #3

Introduced by: **Union County Medical Society**
Subject: **Advertisement of Society Office (Conflict of Interest)**
Referred to: **Reference Committee "A"**

Whereas, many physician members of the Medical Society of New Jersey have exercised their right to advertise their participation in various health plans, HMOs, PPOs, or like entities in advertisements for those entities; and

Whereas, identification of the physician as the present or former holder of an office or position in the Medical Society of New Jersey or a component society may lead the public to assume endorsement by the Society of such entity; now therefore be it

Resolved, that members of the Medical Society of New Jersey are precluded from proclamation of their position, present or former, in the Medical Society of New Jersey or component society as part of an advertisement for any health plan, fiscal intermediary, HMO, PPO, or like entity unless that entity has received the specific endorsement of MSNJ.

Resolution #3 was considered with Resolution #1. The Reference Committee felt a physician could not be precluded from advertising a particular type of health care delivery system or insurance coverage and stating his or her past or present affiliation with MSNJ.

The Reference Committee **recommends** that the Substitute Resolution rather than Resolutions #3 and #1 be adopted:

Resolved, that when members of MSNJ ~~advertise~~ any system of health care delivery ~~or fiscal~~ intermediary and state their ~~present~~ or past affiliation with MSNJ, ~~that such~~ advertisement should include a ~~dis~~claimer that this is not an endorsement by MSNJ.

HOUSE ACTION: Not adopted. Resolution #3 was adopted as originally submitted.

RESOLUTION #5

Introduced by: **Hospital Medical Staff Section**
Subject: **Long-Range Planning for Redistricting of Component Societies**
Referred to: **Reference Committee "A"**

Whereas, rapid changes in law, business, and general public opinion require that physicians have immediate access to information about such changes; and

Whereas, professional staff with the ability to interpret such data and carry out the policies of the Society swiftly and with a high level of sophistication absolutely are necessary in the future together with modern communication equipment; and

Whereas, the present county setup of societies cannot meet the challenge of the 1990s because small county societies do not have the financial resources to provide their members with such staff and equipment; now therefore be it

Resolved, that the Committee on Long-Range ~~Plan~~ning and Development be ~~empowered to~~ study the feasibility of ~~restructuring~~ the component societies along ~~population~~ lines rather than county lines with ~~roughly~~ equal regions of perhaps 800 to 900 physicians each; such regions will be so nearly equal ~~that~~ no advantage will accrue to ~~one region~~ over another and each ~~region will be~~ able to afford a smoothly oper~~ating~~ communications and information center.

The Reference Committee felt the idea of restructuring was sound but that the suggested lines should not be the guiding principle in such restructuring.

The Reference Committee **recommends** that the following Substitute Resolution for Resolution #5 be adopted:

Resolved, that the Committee on Long-Range Planning and Development consider ~~other~~ methods to improve representation of all members of MSNJ ~~but that the present structure of the county and medical societies not be disrupted~~ taking into consideration population densities and practice patterns.

HOUSE ACTION: Adopted Substitute Resolution as amended by the House of Delegates.

RESOLUTION #6

Introduced by: **Hospital Medical Staff Section**
Subject: **Composition of the Board of Trustees of MSNJ**
Referred to: **Reference Committee "A"**

Whereas, the Committee on Long-Range Planning and Development has held that there should be an equitable method of selecting trustees that more directly will reflect present-day needs of the membership; and

Whereas, line accountability will be improved if each trustee has a direct connection with the component society he represents; and

Whereas, component societies are in the best position to judge the qualifications of nominees who are known to them; now therefore be it

Resolved, that the present election process for trustees be changed to permit each component society to elect one trustee from among their membership, except that any component society with more than 750 members shall elect a maximum of two representatives; and be it further

Resolved, that this resolution be referred to the Committee on Revision of Constitution and Bylaws for immediate action to amend the Bylaws.

Resolutions #6, #10, and #13 are essentially the same. Therefore, the Reference Committee considered them as one resolution. Although there was much debate, the members of the Reference Committee felt that the majority of those present favored the basic concept of the Resolutions and that Resolution #13 best expressed the recommended change. The Reference Committee believes especially that the third Resolved of Resolution #13 would help to achieve a better dissemination of the actions of the Board of Trustees to the county medical societies.

The Reference Committee **recommends** that Resolution #6 be rejected.

HOUSE ACTION: Adopted. Resolution #6 was rejected.

RESOLUTION #10

Introduced by: **Bergen County Medical Society**
Subject: **Election of MSNJ Trustees by County Medical Societies**
Referred to: **Reference Committee "A"**

Whereas, the current process of electing MSNJ trustees by the House of Delegates on the judicial district basis may not provide for direct accountability to the individual county medical societies; and

Whereas, the concept of having each county medical society elect their own trustee would provide equal representation of county medical societies on the Board of Trustees; and

Whereas, this election of the trustees by the county medical societies would result in direct accountability of each trustee to his county medical society; now therefore be it

Resolved, that the present election process of trustees by the House of Delegates on the judicial district basis be changed so that each county medical society having fewer than 750 members will elect one trustee to the MSNJ Board of Trustees; and be it further

Resolved, that a county medical society with more than 750 members will elect two trustees, with the proviso that no county will have more than two trustees elected.

Resolutions #6, #10, and #13 are essentially the same. Therefore, the Reference Committee considered them as one resolution. Although there was much debate, the members of the Reference Committee felt that the majority of those present favored the basic concept of the Resolutions and that Resolution #13 best expressed the recommended change. The Reference Committee believes especially that the third Resolved of Resolution #13 would help to achieve a better dissemination of the actions of the Board of Trustees to the county medical societies.

The Reference Committee **recommends** that Resolution #10 be rejected.

HOUSE ACTION: Adopted. Resolution #10 was rejected.

RESOLUTION #13

Introduced by: **Monmouth County Medical Society**
Subject: **Change in Election Process of Trustees**
Referred to: **Reference Committee "A"**

Whereas, a recommendation was proposed by the Committee on Long-Range Planning and Development that the election of trustees by the House of Delegates be discontinued; and

Whereas, a change in the present election process would afford a more democratic procedure of election and provide equal representation of the county medical societies on the Board of Trustees; and

Whereas, the decisions of the Board of Trustees are becoming increasingly more important to the everyday practice of medicine and their input and information necessary to the decision-making process; now therefore be it

Resolved, that the House of Delegates change the present election process for trustees; and be it further

Resolved, that each county medical society has the responsibility to elect or appoint one trustee, with the provision that any county with more than 750 active members shall be entitled to an additional trustee, with a limitation of two trustees from any given county; and be it further

Resolved, that said trustee(s) would sit on the executive board of his respective county medical society thereby being directly accountable to his fellow physicians.

Resolutions #6, #10, and #13 are essentially the same. Therefore, the Reference Committee considered them as one resolution. Although there was much debate, the members of the Reference Committee felt that the majority of those present favored the basic concept of the Resolutions and that Resolution #13 best expressed the recommended change. The Reference Committee believes especially that the third Resolved of Resolution #13 would help to achieve a better dissemination of the actions of the Board of Trustees to the county medical societies.

The Reference Committee **recommends** that Resolution #13 be adopted.

HOUSE ACTION: Not adopted. Resolution #13 was rejected.

RESOLUTION #15

Introduced by: **Monmouth County Medical Society**
Subject: **MSNJ—One-Day Seminar**
Referred to: **Reference Committee "A"**

Whereas, the art and science of medicine as developed over the centuries by our predecessors and the application of the art and science of medicine as manifest in its most effective and personal form by the physicians of New Jersey currently is being undermined, debased, and disrupted by well-intended, but nonetheless erroneous and at times disastrous, interference with both the delivery of health care, as well as the performance of health care; and

Whereas, there has been a certain lethargy manifested by the body of the medical profession, as well as a lack of unity of purpose and a lack of strength of voice, and an absence of a single forum which has spoken of the enormity of the problems facing medicine as seen by its practitioners; and

Whereas, the lay public, patients, legislators, economists, and so on, and even our own uninformed fellow physicians, should interpret the above-mentioned lethargy to be our measure of the extent of the problem; now therefore be it

Resolved, that the House of Delegates call on all of its own members, its fellow members of the Medical Society of New Jersey, and its fellow physicians who are not members of the Medical Society of New Jersey, to attend a one-day seminar in New Jersey; such seminar to require confirmation of attendance by all requested to come and to be held on a weekday and the agenda to be drawn up by the Board of Trustees, but to include the areas of malpractice, fee controls, and governmental attempts at regulating medical judgment and practice at the expense of patient well-being as in the PRO regulations.

There was confusion as to what was meant by this Resolution. The original sponsor was not present to address the Resolution. When a delegate from Monmouth County was informed that the word seminar was inappropriate and that a protest demonstration was the intent of the Resolution. The Reference Committee felt that, at this time, there was no specific issue to engender a successful protest.

The Reference Committee **recommends** that Resolution #15 be rejected.

HOUSE ACTION: Adopted. Resolution #15 was rejected.

RESOLUTION #19

Introduced by: **Essex County Medical Society**
Subject: **Terminating the Use of Artificial Feeding and Hydration Methods in Patients Who Have Severe Brain Damage or Deterioration**
Referred to: **Reference Committee "A"**

Whereas, along with the explosion of medical care technology over the last several decades there has been a marked increase in the ability to sustain life over long periods of time by artificial supports, particularly exemplified by the mechanical respirator but also by feeding and hydration methods ranging from simple intravenous fluids to central venous catheter hyperalimentation, and also refinements on the old nasogastric and gastrostomy feeding tubes, all supplemented with antibiotics whenever infection supervenes; and

Whereas, it would appear that this ability to sustain bodily functions almost has become an end in itself, forgetting the basic condition of the individual patient and the possible long-term effects; and

Whereas, prolonged artificial feeding methods, particularly when the patient has severe brain damage or dysfunction, have been used to sustain life where there are no signs of cognitive living, often to the extreme anguish of the families of such patients, let alone the apparent useless heavy expenditure of capital and governmental funds; and

Whereas, there have been cases of severe cerebrovascular accidents with persistent total coma that have been maintained for a year or more on nasogastric tubes or other artificial feeding methods, at horrendous expense and with no possibility that the patient would return to any semblance of cognitive living; and

Whereas, there have been many instances when families of such deteriorated patients have requested that artificial feeding be discontinued, only to be told in a condescending "we-know-best" manner that "one cannot do that ... feedings must be continued ... where there is a spark of life, there is a soul," and other such suggestively self-serving statements; and

Whereas, New Jersey again has set precedent with the recent high court decision in the *Conroy* case which stated that a nursing home patient, comatose, need not have the nasogastric tube feeding continued against the family's wishes since there had been an expressed desire by the patient prior to her coma illness that no heroic support measures be used on her, and this feeding method, certainly not a natural one, was deemed heroic when used to sustain her state of nonexistence for months and months; and

Whereas, society now is coming to realize more and more that quality of life is much more important than just its simple prolongation when there has been increasing irreversible deterioration of all thought processes; now therefore be it

Resolved, that the standards of good medical practice in the long-term care of patients who have severe brain damage or dysfunction and who show no evidence that they ever will be able to return to a state of vital cognitive life and who cannot or will not take oral fluids and nourishment no longer should include forced artificial alimentation and hydration on a continued basis, such as by the intravenous or central catheter routes, or nasogastric or gastrostomy tube feeding, or any other invasive methods, all of which simply would prolong bodily existence but not life; and be it further

Resolved, that previously expressed desires of patients and certainly the wishes of responsible family members who request termination of artificial feeding should be heeded, and no longer should medical and health facility personnel try to force continuation of such alimentation against the wishes of the family or other persons responsible; and be it further

Resolved, that the Medical Society of New Jersey and in turn the American Medical Association should promote and publicize these concepts of caring and kindness to patients and their concerned families.

Resolutions #19 and #20 were considered together by the Reference Committee.

Because of the complexity of the issues involved, the Reference Committee **recommends** that Resolutions #19 and #20 be referred to the Committee on Biomedical Ethics, which actively is addressing these issues in light of present legislation and social attitude.

HOUSE ACTION: Adopted. Resolution #19 was referred to the Committee on Biomedical Ethics.

RESOLUTION #20

Introduced by: **Essex County Medical Society**
Subject: **Withholding of Acute Care to Patients with Irreversible Severe Brain Dysfunction**
Referred to: **Reference Committee "A"**

Whereas, many of the advances in medical therapy and care over the past generation have caused marked improvement in survival from serious illness (which is wonderful for patients who have been able to get back to vital active living), but, also, these have had the very negative effect of prolonging the unhappy lives of many patients who have severe irreversible brain dysfunction and who normally would have succumbed to pneumonia or other acute illnesses; and

Whereas, there is an increasing population of these persons, often bedridden, usually existing in nursing institutions in a noncognitive and noncommunicative state, requiring total care, and imposing a tremendous emotional and financial drain on their families and others responsible for them; and

Whereas, there have been more and more thoughtful discussions and expressions on the part of patients, families, theologians, philosophers, and all those involved in caring for these patients as to how to give them good care but not prolong their sad existence in a live body but with a mind that long since totally and irretrievably has gone; now therefore be it

Resolved, that, in the light of evolving philosophical, ethical, and legal principles, there are new standards emerging regarding the withholding of life-saving acute care treatment for chronically ill patients who have severe irreversible brain dysfunction, and these need to be promulgated more widely, starting with the Medical Society of New Jersey and the American Medical Association as well as hospital, nursing, religious, and other groups; and be it further

Resolved, that, with the particular instance of an acute illness (infectious or cardiovascular) striking a chronically ill institutionalized or home-nursed patient who has had progressive severe brain dysfunction and has lost all cognitive life, just existing to be fed and diapered, the proper ethical and caring reaction to such an event for those involved would be as follows:

For the attending physician: It should be deemed ethically correct and within the standards of good medical practice for him to withhold antibiotic and other acute curative and special support therapy, but make sure that good nursing care is continued.

For the nursing facility: The urge to shift the patient to an acute care hospital in order to "do something" should be avoided, as long as good nursing care is present or can be arranged.

For the family (if there is one) and others responsible: To be avoided staunchly is acquiescing to heroic measures just to have the patient survive in a still further depleted state until the next episode.

For the patient: This individual noncognitive person should be allowed to "let nature take its course" with tender nursing care and proper medications for comfort but not for further extension of sad survival days in an un-living state.

Resolutions #19 and #20 were considered together by the Reference Committee.

Because of the complexity of the issues involved, the Reference Committee **recommends** that Resolutions #19 and #20 be referred to the Committee on Biomedical Ethics, which actively is addressing these issues in light of present legislation and social attitude.

HOUSE ACTION: Adopted. Resolution #20 was referred to the Committee on Biomedical Ethics.

REFERENCE COMMITTEE "B"

Reports: ***SECRETARY***
TREASURER
COMMITTEE ON FINANCE AND BUDGET
COMMITTEE ON ANNUAL MEETING
NOMINATIONS FOR EMERITUS MEMBERSHIP
RESOLUTION #27

Members:
John W. Holdcraft, M.D., Chairman, Gloucester
Angelo S. Agro, M.D., Camden
Fred M. Palace, M.D., Morris
Benjamin I. Smolenski, M.D., Burlington
Joseph P. Zawadsky, M.D., Middlesex
Rudolf E. Schwaeble, M.D., Alternate (absent), Morris

SECRETARY

ARTHUR BERNSTEIN, M.D., MILLBURN
(Reference Committee "B")

The office of the Secretary has continued its usual routines, primarily involving maintenance of membership records, correspondence, minutes of Board of Trustees' meetings, telephone inquiries, and completion of numerous questionnaires originating from various sources.

During the administrative year, the Secretary attended the meetings of the Board of Trustees and the several committees of which he is chairman, member, or advisor.

MEMBERSHIP (AS OF DECEMBER 31, 1984)

Active:	Paid	7,609	
	Exempt	922	
Resident:	Paid	111	8,642***
*Associate:	Paid		30
**Affiliate:	Paid		95
	Exempt		4
State emeritus			771
Total of above			9,542
State honorary			8
New and reinstated members:			
Active			523
Resident			76
State emeritus			1
*Associate			31
**Affiliate			2
Change of status			19
Transfers within the state			38
Transfers out-of-state and resignations			87
Members deceased			131
Members dropped			130
Active:			
a. Nonpayment of dues		95	
b. Did not comply with Bylaw requirements regarding continuing medical education		28	
c. New Jersey license voluntarily surrendered		2	
d. New Jersey license suspended		1	
e. New Jersey license retired		1	
f. New Jersey license ineligible		2	
**Affiliate (nonpayment of dues)		2	

*Associate membership (nonlicensed in New Jersey) designates interns and residents.
**Affiliate membership physicians who no longer practice in New Jersey.
***Adjusted for transfers out-of-state, resignations and deaths.

A comparison of December 31, 1984, to December 31, 1983, by county, shows the following net changes of active paid memberships:

Atlantic	- 4
Bergen	+26
Burlington	+12
Camden	+ 6
Cape May	- 1
Cumberland	0
Essex	-34
Gloucester	+12
Hudson	-12
Hunterdon	+11
Mercer	+ 3
Middlesex	+22
Monmouth	+26
Morris	+17
Ocean	+15
Passaic	-10
Salem	- 1
Somerset	+ 1
Sussex	- 2
Union	- 2
Warren	- 3

AMA MEMBERSHIP

A total of 8,269 members of MSNJ maintain active membership in the AMA. The Society's representation in the AMA House of Delegates stands at nine delegates—one for each thousand members, or fraction thereof.

CREDENTIALS

The Committee on Credentials throughout the yea

TABLE

Received:	*Associate Residents	Licensed Residents	Active	Grand Total
	48	103	457	608
Reviewed and found:	***Associate Residents**	**Licensed Residents**	**Active**	**Grand Total**
(A) Satisfactory	42	95	430	567
(B) Unsatisfactory	0	0	0	0
Pending:	0	5	17	22
Withdrew:	6	3	10	19
Grand Total	48	103	457	608

*Associate membership (nonlicensed in New Jersey) designates interns and residents.

reviewed and acted upon membership applications and their supporting credentials as submitted through the component societies. The statistical breakdown in the Table reflects the Committee's activities during the period February 15, 1984, through February 14, 1985.

The Committee extends appreciation to the directors and the secretaries of component societies, and to those who assist them, as well as the County Credentials Committees, for their cooperation in processing membership applications. It especially would be helpful to the Credentials Committee of MSNJ if those who process credentials in the component societies would call specific attention to any deficiencies or questionable data being submitted on the application form. This procedure will help insure more accurate and speedy evaluation of credentials. The chairman wishes to thank his Committee members and MSNJ staff for their diligence and cooperation.

MEMBERSHIP DIRECTORY

The 1985 edition of the *Membership Directory* has been completed and distributed to all members. This edition has been revised to include a page number index for easy location of member listings in the biographical section. As a result of increased costs relative to production of the *Directory*, it was necessary to increase the sale price to $35 (plus tax) per copy. Additional copies of the *Membership Directory* are available, for a fee, by contacting Mrs. Guest at MSNJ headquarters, Lawrenceville. There were 2,565 copies of the 1983 edition sold to nonmembers.

The Reference Committee **recommends** that the report be filed.

HOUSE ACTION: Filed.

TREASURER

PAUL J. HIRSCH, M.D., TREASURER, BRIDGEWATER
(Reference Committee "B")

These interim financial statements, prepared in accordance with generally accepted accounting principles, reflect the financial position and results of operations of the Medical Society of New Jersey through February 28, 1985.

Since they are interim statements the figures are unaudited. A complete audit will be conducted of the books of the Society as of May 31, 1985, and an audited report prepared as of that date. A complete audit was made as of May 31, 1984.

Balance Sheet
February 28, 1985
(unaudited)

Assets		
Cash		$ 77,705
Investments in money market fund		1,349,018
Marketable securities—at cost (approximate market)		235,000
Accounts receivable—member assessments		546,150
Medical student loans (net allowance for doubtful loans of $30,000)		402,508
Property, plant, and equipment		
Land	$ 150,000	
Building and improvements	2,551,229	
Furniture and fixtures	410,089	
	3,111,318	
Less allowance for depreciation	(558,771)	2,552,607
Prepaid expenses		44,583
Other assets		143,230
		$5,350,801

Liabilities and Fund Balance	
Accounts payable and accrued expenses	$ 271,270
Assessments collected for AMA	27,555
	298,825
Mortgage payable	1,495,893
Deferred revenue from member assessments	1,718,750
Deferred professional liability assessments	24,522
Deferred revenue—other	82,332
Fund balance	1,730,479
	$5,350,801

Statement of Revenue and Expenses
9 Months Ended February 28, 1985
(unaudited)

Revenue	
Membership dues	$1,467,548
Publication sales and advertising income	230,451
Amortization of professional liability assessments	73,985
Amortization of Impaired Physicians Program	129,168
Investment income	81,521
Royalty income	116,589
Rental income	74,658
Annual Meeting	35,190
Other income	62,357
Total revenue	2,271,467

Expenses	
Conferences and meetings	302,848
Member services	554,353
Total program expenses	857,201
General and administrative	1,014,167
Interest	112,226
Depreciation	79,426
Total expenses	2,063,020
Excess of revenue over expenses	$ 208,447
Fund balance at June 1, 1984	1,522,032
Fund balance at February 28, 1985	$1,730,479

The Reference Committee **recommends** that the report be filed.
HOUSE ACTION: Filed.

Finance And Budget

Harry M. Carnes, M.D., Chairman, Audubon
(Reference Committee "B")

The Committee on Finance and Budget met on Thursday, March 28, 1985, for the purpose of reviewing the proposed budget for the 1985 to 1986 fiscal year.

The proposed budget and the following recommendations were approved by the Board of Trustees on April 14, 1985, and are submitted to the House of Delegates for approval.

RECOMMENDATIONS

1. The Budget for fiscal year beginning June 1, 1985, and ending May 31, 1986, in the amount of $2,936,000 with $2,125,000 to be raised through member assessments, be adopted.

2. The 1986 assessment be set at $295 per regular dues-paying members (1985 assessment—$275).

3. The 1986 assessment be set at $40 per member for affiliate members (no longer practicing in New Jersey) (1985 assessment—$25).

4. The 1986 assessment for associate members (interns-residents nonlicensed in New Jersey) be set at $25 per member (no change).

5. There be an assessment for 1986 of $25 per member for licensed residents provided the individual is in a residency program entered upon within a reasonable time after his or her graduation from medical school (no change).

6. The 1986 assessment be at $10 per student for medical students (no change).

Statement of Revenue and Expenses
for Proposed Budget
Fiscal Year Ending May 31, 1986

Revenue (other than member assessments)	
Publication sales and advertising income	$ 302,000
Amortization of Impaired Physicians Program	177,000
Investment income	55,000
Royalty income	127,000
Rental income	100,000
Annual Meeting	15,000
Membership Directory sales	30,000
Other income	5,000
Total Revenue	811,000
Expenses	
Conferences and meetings	537,500
Member services	422,000
Publications	296,000
Grant to MSNJ medical student loan fund	3,000
Total Program Expenses	1,258,500
General and administrative	1,422,700
Interest	147,800
Depreciation	107,000
Total Expenses	2,936,000
Amount of expenses over revenue to be raised thru member assessments (including *The Journal* subscriptions and Annual Meeting assessment)	$2,125,000

Revenue From Member Assessment
Fiscal Year Ending May 31, 1986

(7 months) 6/1/85 thru 12/31/85 @ $275 x 7,500 members	$1,203,056
(5 months) 1/1/86 thru 5/31/86 @ $295 x 7,500 members	921,949
	$2,125,005

Proposed Budget
Fiscal Year Ending May 31, 1986

	Approved Budget 1984/85 (as revised)	Estimate For Y/E 5/31/85	Proposal Budget 1985/86
Compensation			
Salaries	$ 793,000	$ 795,200	$ 825,000
Pension Plan	102,700	96,342	105,000
	895,700	891,542	930,000
Professional Fees			
Audit	16,500	16,500	17,000
Legal	45,000	11,000	25,000
Actuarial	1,800	2,061	2,000
Special Consultants	8,000	1,500	6,000
	71,300	31,061	50,000
Councils and Committees			
Public Relations	160,000	160,000	225,000
Legislation	32,000	28,000	63,000
President & Presidential Officers	40,000	37,000	40,000
AMA Delegates	84,000	70,000	90,000
MSNJ Auxiliary	20,000	20,000	23,500
Medical Education	30,000	30,000	32,000
Board of Trustees	20,000	20,000	20,000
Judicial Council	1,200	1,000	1,000
Reimbursement of Reps. to Mtgs.	4,000	2,000	4,000
Other Councils and Committees	20,000	25,000	25,000
Medical Student Association	15,000	14,000	14,000
	426,200	407,000	537,500
Member Services			
Impaired Physicians	215,000	215,000	237,000
Annual Meeting	100,000	90,000	110,000
Professional Liability	96,000	96,000	40,000
Membership Directory	37,000	33,000	35,000
	448,000	434,000	422,000
Publications			
The Journal	251,400	294,750	296,000
Donations			
Grant to MSNJ Medical Student Loan Fund	3,000	3,000	3,000
General Administrative and Operating Expenses			
Building operations— (including depreciation)	392,300	379,263	385,800
Insurance	95,500	93,500	99,000
Payroll taxes	64,000	64,000	69,000
Other general office costs	141,360	146,160	143,700
	693,160	682,923	697,500
Total	$2,788,400	$2,744,276	$2,936,000

The Committee was concerned with the need for raising the dues by $20 a year. However, the Committee was informed that the dues have not been raised for two years and that it was difficult for the Committee to avoid raising the dues more than $20.

The Reference Committee **recommends** approval of recommendations 1 through 6.

HOUSE ACTION: Approved.

The Reference Committee **recommends** that the report be filed.

HOUSE ACTION: Filed.

Committee On Annual Meeting

Frank R. Romano Sr., M.D., Chairman, Dunellen
(Reference Committee "B")

The Committee reviewed suggestions and comments received in an effort to implement changes that will accelerate interest in attending the Annual Meeting. Revisions in the format have been accomplished and the schedule of the House has been changed to accommodate the delegates.

The 1985 House of Delegates will meet on three consecutive days, beginning with its opening session on Thursday afternoon, May 2. The election will be held on Friday, May 3, and the last session of the House will be held on Saturday, May 4. Reference committees are scheduled to meet on Thursday and Friday afternoons (May 2 and 3). The Inaugural Reception and Dinner-Dance will be held on Saturday, May 4.

Suggestions and comments received indicated that at the 1985 Annual Meeting, instead of individual scientific sessions for each of the specialty groups, one major program be presented on a socioeconomic issue facing the medical profession. The program is scheduled for 8:30 A.M., Sunday, May 5, and the topic chosen for the program will be "Appropriate Medical Care During the Last Year of Life."

JEMPAC's Political Forum will be at 5:00 P.M. on Friday, May 3, to be followed by the JEMPAC Wine and Cheese Reception at 5:45 P.M.

The American Association of Medical Assistants, State of New Jersey, Inc. again will sponsor the Message Center.

The Advance Convention Program was mailed in late March.

Housing applications were sent to all component medical societies, and copies have appeared in several issues of *The Journal.*

Arrangements have been made for a meeting package rate at the Americana Host Farm Resort based on the modified American plan, including dinner and breakfast daily, the Cabaret entertainment featuring a different show each evening at no extra cost, state sales tax, and all gratuities covering bellmen for in/out luggage service, chambermaids, and all meal service as outlined, with the cost of the Inaugural Dinner on Saturday included.

There will be adequate space for Informational, Scientific, and Technical Exhibits in the Exhibit Hall.

The Medical Inter-Insurance Exchange of New Jersey will sponsor a Coffee Lounge in the Exhibit Hall.

The Committee has investigated possible sites for the Annual Meeting in New Jersey but has not been successful in finding sites in New Jersey which would be suitable for the Society's needs for the 1986 meeting.

RECOMMENDATIONS

1. That the 1986 Annual Meeting be held in Philadelphia, Pennsylvania, at a site and on dates to be determined by the Board of Trustees pursuant to the report and recommendations of the staff and the Committee on Annual Meeting.
2. That the daily schedule for the 220th Annual Meeting follow closely that which was approved for the 219th Annual Meeting.

The Reference Committee **recommends** that the recommendations be approved.

HOUSE ACTION: Approved.

The Reference Committee **recommends** that the report be filed.

HOUSE ACTION: Filed.

Nominations for Emeritus Membership

(Reference Committee "B")

The following nominations for election to emeritus membership at the 1985 Annual Meeting have been received from the component societies. Conforming to the provisions of the Bylaws, Chapter I—Membership, Section 1—Composition (d), all nominees have been members in good standing of a component society and who by reason of age or infirmity have retired from the active practice of medicine, or members of this Society who have been disabled by reason of military service.

Atlantic County
Edward H. Dyer, M.D., Ventnor City; age 77
Harry P. Goodman, M.D., Margate City; age 66
Martin Green, M.D., Margate City; age 73
Peter H. Marvel, M.D., Greenville, DE (formerly Northfield); age 78
Samuel A. Shuster, M.D., Margate City; age 72

Bergen County
Paul F. Caruso, M.D., Rutherford; age 76
Riaz A. Chaudry, M.D., Fair Lawn; age 44
Margaret A. Clark, M.D., Ridgewood; age 69
Harold Davis, M.D., Bergenfield; age 74
Gerald J. Dolan, M.D., Hillsdale; age 73
Basil J. Ellmers, M.D., Oradell; age 80
Donald A. Fonda, M.D., Ridgewood; age 70
Peter E. Hanlon, M.D., Easton, MD (formerly Ridgewood); age 67
William K. Harryman, Jr., M.D., Oradell; age 70
George Horoshowski, M.D., Rutherford; age 64
Emil J. Kakascik, M.D., Garfield; age 76
Robert A. Kritzler, M.D., Ridgewood; age 70
Samuel F. Legato, M.D., Cliffside Park; age 83
D. McCullagh Mayer, M.D., HoHoKus; age 84
Nathan W. Nemiroff, M.D., Oradell; age 75

Robert J. Neville, M.D., Hackensack; age 76
William J. O'Hare, M.D., Ramsey; age 63
Frank A. Patti, M.D., Leonia; age 79
Doris E. Rappaport, M.D., Loveladies; age 69
Francis Rosner, M.D., Maywood; age 68
Leo P. Schultz, M.D., Allendale; age 74
Anthony V. Stassi, M.D., Lodi; age 73
Ivory U. Sully, M.D., Leonia; age 69
Reinold W. ter Kuile, M.D., Ridgewood; age 82
Edward F. Vanderbush, M.D., Mahwah; age 65
Alfred R. Wollack, M.D., Park Ridge; age 68
Ruth Zuckerman, M.D., Teaneck; age 70

Burlington County
Frederick D. Fahrenbruch, M.D., Moorestown; age 84
Alida H. Harrington, M.D., Moorestown; age 66

Camden County
Thomas M. Kain, Jr., M.D., Haddonfield; age 68
Matthew A. Olivo, M.D., Westmont; age 70
Reginald J. Raban, M.D., Cherry Hill; age 66
Fred A. Valusek, M.D., Cherry Hill; age 67

Essex County
Lewis F. Baum, M.D., Vineyard Haven, MA (formerly West Orange); age 70
Edward N. Comando, M.D., Livingston; age 66
Robert E. Erler, M.D., Bricktown; age 69
Albert C. Grunow, M.D., Rumson; age 64
Roger P. Lochhead, M.D., Essex Fells; age 61
Sidney E. Pendexter, Jr., M.D., West Orange; age 69
Athanasios P. Roumanas, M.D., Livingston; age 64
Adele S. Vail, M.D., Short Hills; age 66
Frank A. Williams, M.D., South Orange; age 72

Gloucester County
James G. Kehler, Jr., M.D., Woodbury; age 67

Hudson County
Dorothy L. Aymar, M.D., Toms River; age 65
Selig L. Brauer, M.D., Jersey City; age 80
Morris B. Feldman, M.D., Jersey City; age 70
Francisco A. Figurelli, M.D., Jersey City; age 71
John J. Muccia, M.D., Jersey City; age 79
John P. Riordan, M.D., North Caldwell; age 70

Middlesex County
George M. Benko, M.D., Woodbridge; age 66
Mauro M. DeGirolamo, M.D., Venice, FL (formerly Parlin); age 65
William B. Greenberg, M.D., Perth Amboy; age 66
Jack A. C. King, M.D., Metuchen; age 65
Maria G. Koroljow, M.D., New Brunswick; age 68
Steven Sawchuck, M.D., Skillman; age 69
Edward S. Sherwood, M.D., East Brunswick; age 60
Isabelo S. Torio, M.D., Edison; age 65
George J. Urban, M.D., Fords; age 67
John S. Van Mater, M.D., Jamesburg; age 69

Monmouth County
Louis F. Albright, M.D., Spring Lake; age 79
Irving Baer, M.D., Toms River; age 70
Douglas W. Payne, M.D., Spring Lake; age 68

Morris County
Leon D. Rivas, M.D., Parsippany; age 70

Passaic County
Jerome Brawer, M.D., Hawthorne; age 68
Frank A. DeDominicis, M.D., Hawthorne; age 68
Kurt Manrodt, M.D., Pompton Plains; age 69
Morris H. Saffron, M.D., New York, NY (formerly Clifton); age 80
M. Bernard Winkler, M.D., Fair Lawn; age 64

Somerset County
Bernard Marcus, M.D., Somerville; age 71
Jon M. Wilson, M.D., Bound Brook; age 63

Union
Elizabeth N. Conover, M.D., Berkeley Heights; age 69
Jose Garcia, M.D., Hillside; age 53
Israel A. Hernandez, M.D., Elizabeth; age 66
Philip J. G. Quigley, M.D., Point Pleasant Beach; age 55
Charles R. Ream, M.D., Lebanon; age 66

The Reference Committee **recommends** that the nominations be approved.

HOUSE ACTION: Approved.

Supplemental Report #1
Nominations For Emeritus Membership

(Reference Committee "B")

The following additional nominations for election to emeritus membership have been received:

Bergen County
Joseph Solomon, M.D., Tenafly; age 74
Charlotte A. Kleiner, M.D., Leonia; age 63
J. John Kristal, M.D., Hackensack; age 75

Morris County
George Babcock, M.D., Kinnelon; age 69
Donald P. Burt, M.D., Morristown; age 62
Alfred T. DeVito, M.D., Basking Ridge; age 68
E. Philip Gelvin, M.D., South Orange; age 71
Charles E. Hough, M.D., Orlando, FL (formerly Bloomfield); age 67
Stanley Kordys, M.D., Newark; age 62
Albert N. Morgese, M.D., San Francisco, CA (formerly Morris Plains); age 61
Walter A. Reiter, M.D., Summit; age 62
William G. Talmage, M.D., Succasunna; age 82
John L. Tyler, M.D., Sparta; age 69
Arthur D.L. Zampella, M.D., Newfoundland; age 68

Passaic County
Perry D. Cohn, M.D. Passaic; age 67
Alfred P. Griffith, M.D., Toms River; age 64
Herbert N. Kohn, M.D., Passaic; age 73

Union County
Ellis J. Mischel, M.D., Summit; age 67

The Reference Committee **recommends** that the nominations be approved.

HOUSE ACTION: Approved.

Supplemental Report #2
Nominations For Emeritus Membership

(Reference Committee "B")

The following additional nominations for election to emeritus membership have been received:

Camden County
Robert A. Haines, M.D., Cherry Hill; age 64

Essex County
Edward F. McMahon, M.D., Somerville, age 68
Robert J. Waldron, M.D., Upper Montclair; age 61

Salem County
Mary T. DiMedio, M.D., Salem; age 65

The Reference Committee **recommends** that the nominations be approved.

HOUSE ACTION: Approved.

Supplemental Report #3
Nominations For Emeritus Membership

(Reference Committee "B")

The following additional nominations for election to emeritus membership have been received:

Bergen County

Joseph Ferrante, M.D., Ridgefield; age 74

Essex County
William J. Duffy, M.D., Locust; age 64

The Reference Committee **recommends** that the nominations be approved.

HOUSE ACTION: Approved.

Resolution #27

Introduced by: **Hudson County Medical Society**
Subject: **Return Annual Meeting to New Jersey**
Referred to: **Reference Committee "B"**

Whereas, the Medical Society of New Jersey is the oldest medical society in the country; and

Whereas, the Medical Society for many years enjoyed the atmosphere and facilities at Atlantic City for its Annual Meeting; and

Whereas, the physicians of New Jersey prefer to meet in their native state; and

Whereas, no other place in the eastern United States has as many and varied attractions as Atlantic City; now therefore be it

Resolved, ~~that the Annual Meeting be returned to Atlantic City at the earliest possible date.~~

The Reference Committee heard a good deal of testimony in favor of returning the Annual Meeting to a site in New Jersey, but there was less strong support for a return to Atlantic City specifically.

The Reference Committee **recommends** that the following Substitute Resolution for Resolution #27 be adopted:

Resolved, that the Annual Meeting be returned to New Jersey at the earliest possible date.

HOUSE ACTION: Adopted Substitute Resolution.

REFERENCE COMMITTEE "C"

Reports: ***COUNCIL ON MEDICAL SERVICES***
BOARD OF TRUSTEES' ITEMS
NEW JERSEY STATE MEDICAL UNDERWRITERS, INC.

RESOLUTIONS #7, 8, 9, 11, 12, 14, 21, 22, 25, 26, 28, 29E, 30E

Members:
Anthony P. Caggiano, Jr., M.D., Chairman, Essex
Allan L. Gardner, M.D., Morris
Felix G. Salerno, M.D., Hunterdon
Bessie M. Sullivan, M.D., Union
Charles J. Zwerling, M.D., Monmouth
Meyer L. Abrams, M.D., Alternate, Burlington

COUNCIL ON MEDICAL SERVICES

JOSEPH FLEISHER, M.D., CHAIRMAN, BAYONNE
(Reference Committee "C")

The Council is charged with the responsibility of studying and evaluating matters relevant to maintenance and advancement of the standards and character of medical practice in New Jersey and the investigation of the economic and social aspects of medical care.

1. **Board of Trustees' Referral—Resolutions #14, #15, and #16, 1983 House of Delegates.** The Board of Trustees, at its meeting on May 2, 1983, referred Resolutions #14, #15, and #16 to the Council on Medical Services for study and report. The Council submitted a report dated October 12, 1983, to the Board of Trustees, which, at its meeting on November 20, 1983, was referred back to the Council for review and restatement.

The sponsor of the resolutions spoke to the Council, pointing out that under the present system of required substitution of generic drugs under Medicaid and other drug programs, the physician is unaware of any substitution and should not be held liable for any resulting adverse or different reaction to the generic drug that would not have taken place if the brand name drug had been dispensed as he had wished. It was felt that drug companies producing brand name drugs are held to much higher standards than those manufacturing generic brands.

After careful consideration, the Council agreed to resubmit its recommendation with the clarification that it is based on the fact that the Food and Drug Administration does not impose nor does the manufacturer necessarily carry out in the production of most generic drugs the same standards and rigid quality review as the manufacturer of brand name drugs. Also, the pharmacists' possible frequent switching of generic drugs when filling prescriptions without the physician's knowledge, produces the jeopardy of the misidentification of drugs by patient and physician.

The Council recommended that the Board of Trustees strongly protest the legislation that now governs the generic prescribing system on the grounds that it has the potential to affect adversely the quality of medical care and increase physician liability in prescribing drugs over which he has very little control.

It was the opinion of the Board that Resolution #14, #15, and #16 should not be implemented because there is no evidence of a documented problem in New Jersey.

2. **Medicaid's Denial of Payment for Attending Physician Care.** The Council reviewed correspondence regarding Medicaid's denial for payment of a doctor's services as attending physician because the hospital claim for the corresponding period was denied. The doctor explained that his main complaint was that approximately two years had passed between the time the care was rendered, and the time the claim was denied and collection of an overpayment was requested of him. The Council recommended that the Board of Trustees protest the delay in requesting a refund from the doctor and supported and urged that a reconsideration hearing be granted the doctor. The recommendation was approved by the Board of Trustees.

3. **Board of Trustees' Referral—Resolution #9, 1984 House of Delegates—Prevention of Windfall Profits.** The discussion of this issue was postponed pending documentation from the author of Resolution #9 containing specific data to the effect that the problem of differences in fee schedules does exist. When Resolution #9 is reviewed, a recommendation will be made to the Board of Trustees.

4. **Board of Trustees' Referral—Development of Relative Value Guidelines.** The Board of Trustees, at its meeting on October 21, 1984, directed the Council on Medical Services to research and consider the development of suggested relative value guidelines for the various specialties in New Jersey.

It was reported that the AMA has submitted a proposal to the Health Care Financing Administration to allow them to set up relative value guidelines.

The Council approved the proposal in principle, and will advise the Board of Trustees that it is in the process of researching the problem. The discussion of relative value guidelines will continue at future meetings of the Council.

5. **New Jersey Academy of Family Physicians' Resolution—Medication Expiration Dates on Prescription Labels.** The Council recommended and the Board of Trustees approved support of the Resolution passed by the New Jersey Academy of Family Physicians 1984 House of Delegates regarding required expiration date labeling of prescription medication.

The Reference Committee **recommends** that the report be filed.

HOUSE ACTION: Filed.

Supplemental Report #1
Council On Medical Services

Joseph Fleisher, M.D., Chairman, Bayonne
(Reference Committee "C")

The following items from the Council on Medical Services meeting on January 9, 1985, were approved by the Board of Trustees at its meeting on March 17, 1985.

Corporate Restructuring of New Jersey Hospitals. The Board of Trustees, at its meeting on April 15, 1984, approved a recommendation from the Council that the Medical Society of New Jersey maintain that the assets of unbundled hospital corporations should be included in the assets and income of the hospital for purposes of rate development.

Hospitals are continuing to unbundle. The Council requested the Board again to notify the Commissioner of Health, the New Jersey Hospital Association, and Governor Kean of the position of the Society in this matter and that active efforts be taken to bring about a change.

Physicians' DEA Numbers on Medication Labels. It was reported that with the advent of computers in pharmacies, prescription labels also contain the prescribing physician's DEA number.

The Council felt that this is an extremely careless practice which could encourage counterfeit prescriptions. It was recommended that the Board of Trustees protest to the New Jersey State Board of Pharmacy the availability of physicians' prescription (DEA) numbers on medication prescription labels.

The Board of Trustees noted that a state statute requires the label to carry the DEA number. Therefore, the Society has joined with the State Board of Medical Examiners and the Department of Health to change the requirement. A bill has been introduced into the Legislature which would prohibit the placing of DEA numbers on medication labels.

The Reference Committee **recommends** that the supplemental report be filed.

HOUSE ACTION: Filed.

Board of Trustees' Items

BLUE SHIELD PARTICIPATING PHYSICIAN AGREEMENTS—RESOLUTION #5 (1984)

(Reference Committee "C")

Resolution #5 was adopted as amended by the 1984 House of Delegates. The first resolved called upon the Society to demand that Blue Shield permit patients of participating physicians to access major medical coverage. It also requested major medical carriers to recognize compensability.

That issue has been before the House of Delegates and the Board of Trustees previously. The Society has sent requests to the insurance industry, the Department of Insurance, and Blue Shield in that regard. In response, the Society has been advised that the entire matter is a contractual problem between participating physicians and Blue Shield. As long as physicians sign the participating physicians' agreement of Blue Shield, they are abrogating their rights to a complete fee. On the other hand, physicians receive direct payment from Blue Shield when the patient is eligible for service benefits.

The second resolved called upon the Board of Trustees to take appropriate legal action. Legal counsel advised that there is not a reasonable probability for successful litigation of this issue. It is estimated that the cost of litigation would be between $100,000 to $250,000.

Based upon the opinion of counsel, the Board voted not to institute expensive and futile litigation. The Board is fully sympathetic to the plight of the participating physician and believes the most effective action that can be taken is for participating physicians to write to the President of Blue Shield and articulate their opinion.

The Reference Committee **recommends** that the report be filed.

HOUSE ACTION: Filed.

COLLECTIVE BARGAINING AGENT FOR PHYSICIANS' SERVICES—RESOLUTION #25 (1984)

(Reference Committee "C")

The 1984 House of Delegates adopted the above Resolution which called for the Society, or an organization it sponsors, to act as a collective bargaining agent for its members. The Board of Trustees directed legal counsel to determine whether or not collective bargaining is permissible under the laws of the United States and New Jersey. The following report was presented to the Board of Trustees:

Federal Law

I—The Sherman Act

This Act, passed in 1890, has seven sections. Two of these are of major interest to associations. Section 1 of the Act states in part: "Every contract combination, in the form of trust or otherwise, or conspiracy in restraint of trade or commerce among the several states or with foreign nations, is hereby declared illegal." (15 U.S.C. §1) Section adds, "Every person who shall monopolize or attempt to monopolize etc.," and finishes with "... shall be deemed guilty of a felony..." (15 U.S.C. §2).

Section 1 is far more commonly asserted against

associations than Section 2, although, both could be charged in the complaint based on the same facts.

There is no question the Society is a combination within the meaning of Section 1. The words "commerce among the several states" have been read out of the Act by court interpretations. Only activities which are purely and absolutely local would escape scrutiny. Therefore, Sherman Act jurisdiction is assumed for this discussion.

II—The Clayton and Federal Trade Commission Acts

The Clayton Act governs a number of activities, including tying arrangements, exclusive dealing, price discrimination, mergers, acquisitions, and joint ventures. The Federal Trade Commission Act gives the Commission broad responsibility for the prevention of "unfair methods of competition in or affecting commerce." [Federal Trade Commission *v* Cement Institute, 333 U.S. 683, 694 (1948)]. The FTC Act reaches activities carried out by a single person or firm. Joint action also is covered. FTC jurisdiction regarding "unfair" can involve matters which do not have Sherman Act dimensions but would most likely evolve into such if left to develop.

III—Enforcement of Antitrust Laws

The United States Justice Department enforces the Sherman Act, although violations of a Sherman Act type can be reached by the FTC under the provisions of the FTC Act. The FTC and the Justice Department share jurisdiction in the Clayton Act. The FTC has exclusive jurisdiction over the FTC Act.

There are other federal statutes, but I have determined that they do not bear a reasonable significant applicability to the discussion at this point.

New Jersey Antitrust Act

Our state law is embodied in N.J.S.A. 56:9-1 et seq. Essentially, it is a reproduction of the Sherman and Clayton Acts with vested enforcement authority being granted to the State Attorney General. N.J.S.A. 56:9-3 provides every contract or combination in restraint of trade or commerce in this state is unlawful. N.J.S.A. 56:9-4 provides it is unlawful for any person or entity to monopolize, combine, conspire, or attempt to do the same regarding any relevant market within the state.

Collective Bargaining

Collective bargaining for recognized labor unions, under federal and state laws, is an exempted activity from antitrust enforcement activities. Absent the cloak of "union" exemption, collective bargaining is a clear violation of federal and state law. In both instances only "employees" can unionize.

Are physicians "employees" within the tenor of Resolution #25? The Resolution does not speak directly of employment and its overall impression appears to be directed toward governmental and other third-party interference with physician and patient relationships. The physician in those instances is an independent contractor and not an employee. Union activity and collective bargaining would not be lawful for such persons.

Employed physicians with common employers could unionize. These would include, for example, employees in staff-modeled HMOs, salaried employees in hospitals, and university professors. The fact that a person is a licensed professional does not mean he cannot become a member of a union. Professionals employed by a common employer could unionize. Following recognition by the National Labor Relations Board, that union could then engage in collective bargaining. The Medical Society of New Jersey could be instrumental in the formation of a union for employed physicians which would then have to petition the National Labor Relations Board for recognition.

Exempt Activities

Since the Medical Society of New Jersey is subject to the authority of the courts of New Jersey, it is authorized under N.J.S.A. 56:9-5(9) to recommend schedules of suggested fees solely as guidelines in determining charges for professional services.

Conclusion

Given current law and existing circumstances, collective bargaining is not lawful nor practical for a substantial identifiable section of the Medical Society of New Jersey membership. The Society, however, may present to government agencies and other third-party payors recommended schedules or rates to be used as guidelines under the state statute mentioned above.

For the reasons outlined by legal counsel, the Board of Trustees voted not to implement the Resolution.

The New Jersey Delegation brought the Resolution to the attention of the AMA House of Delegates in June. A substitute Resolution was adopted which requested the AMA to study the means by which the Association and its federation may assure the fair representation of physicians in matters of quality, access, and reimbursement of medical care. At the Interim Meeting in December, the AMA House of Delegates was provided with a study by the Committee on Medicolegal Problems on the legal risks of collective negotiation by physicians, labor-antitrust exemption, and alternative strategies to promote fair representation.

The Reference Committee **recommends** that the report be filed.

HOUSE ACTION: Filed.

CONSTITUTIONALITY OF MANDATORY ASSIGNMENT LEGISLATION—RESOLUTION #24 (1984)

(Reference Committee "C")

New Jersey introduced a Resolution directing AMA general counsel to research the constitutionality of mandatory assignment being proposed by Congress or any other congressional proposal to force physicians to accept prestipulated fees. The Resolution also called for the federation to be advised of, and supplied with, the written opinion of general counsel.

At the reference committee hearing, New Jersey withdrew the Resolution, since AMA counsel advised that it would prejudice the Association's tactical position. The reference committee agreed that permission to withdraw should be granted.

The Reference Committee **recommends** that the report be filed.

HOUSE ACTION: Filed.

OPPOSITION TO MANDATORY ASSIGNMENT UNDER MEDICARE—RESOLUTION #16 (1984)
(Reference Committee "C")

The AMA House of Delegates adopted a Resolution, introduced by New Jersey, which called upon the AMA to continue to oppose vigorously any attempt by Congress to legislate mandatory assignment under Medicare.

The Reference Committee **recommends** that the report be filed.

HOUSE ACTION: Filed.

NURSING CARE—RESOLUTION #23 (1984)
(Reference Committee "C")

Last year the House of Delegates approved a Resolution calling upon the Department of Health to remove administrative hours from its calculations when determining the adequacy of nursing staffs.

The Commissioner of Health has advised that the adequacy of nursing personnel is based upon whether or not nursing responsibilities are being carried out as required by the regulations. Administrative functions are not calculated except where the nurse, by virtue of training and license, is required to perform these functions. The regulations do authorize ward clerks to perform clerical and non-nursing tasks on the units, and they are functioning in all hospitals to varying degrees.

The Reference Committee **recommends** that the report be filed.

HOUSE ACTION: Filed.

PREMIUM DISCOUNT—PROFESSIONAL LIABILITY INSURANCE—RESOLUTION #3 (1984)
(Reference Committee "C")

This Resolution asked for MSNJ and MIIENJ, in conjunction with other carriers, to present seminars on basic medical-legal matters and to provide premium discounts if warranted.

The New Jersey State Medical Underwriters, Inc., and MSNJ present at least one seminar annually on this issue. In addition, the Risk Prevention Committee of the New Jersey State Medical Underwriters, Inc., provides a medical-legal correspondence course free to insureds of the Exchange, and at modest expense to others. Several thousand physicians have requested the course. Passage of the course provides 20 hours of CME Category I credit, plus two points credit under the High-Risk Evaluation Program. The Risk Prevention Committee cannot document a basis for discounting premiums at this time.

The Committee currently is implementing an audit program and will be developing clinical correspondence courses which are specialty specific.

The Risk Prevention Committee has not been able to effect cooperation on risk prevention activities with other carriers in the state. MSNJ will request consideration by those carriers within their own organizations.

The Reference Committee **recommends** that the report be filed.

HOUSE ACTION: Filed.

PROMOTION OF HMO BY THE UNITED STATES DEPARTMENT OF HEALTH AND HUMAN SERVICES—RESOLUTION #26 (1984)
(Reference Committee "C")

Following the close of the 1984 Annual Meeting, the Society sent a letter to the Secretary of Health and Human Services objecting to the Department's promotion of health maintenance organizations (HMO) by sending circulars to Medicare recipients. This action appears to imply that care rendered through an HMO is superior to and more cost effective than care rendered by private practitioners.

The Director of the Bureau of Program Operations responded as follows: "Under Section 1876 of the Social Security Act, HMOs can contract with the federal government to enroll Medicare beneficiaries and provide covered services to them. Following an HMO's federal qualification and subsequent contract with the Health Care Financing Administration, and at the request of the HMO itself, notices are mailed out to each beneficiary residing in the service enrollment area of the HMO.

"It is not our intent to promote one health care delivery system over another. The purpose of the notice is simply to inform beneficiaries of the existence of an alternative to the traditional fee-for-service system. Because the federal government has an obligation to notify beneficiaries of federal programs of their rights under these programs, we believe that such mailings are appropriate. The notice was developed to acquaint beneficiaries with an alternative system with which most are unfamiliar.

"The language of the notice, which has been approved by the American Medical Association, was designed to be purely informational in nature, not to encourage the use of HMOs over the fee-for-service system. The notice specifically states that enrollment in the HMO is optional and that Medicare beneficiaries who so choose may continue to receive health care from their present physicians and other providers."

The Reference Committee **recommends** that the report be filed.

HOUSE ACTION: Filed.

Supplement Report #1: Board Of Trustees

Frank Y. Watson, M.D., Chairman, Montclair
(Reference Committee "C")

AD HOC COMMITTEE ON PRESENTATION OF MSNJ DRG POSITION

The Ad Hoc Committee on Presentation of MSNJ DRG Position was requested by the Board of Trustees to review the Society's position on DRGs and to recommend a revised position if warranted by current circumstances.

On Sunday, April 14, a proposed position statement was presented to the Board of Trustees. Following discussion and revision, the following position statement was adopted:

POSITION STATEMENT 1985 ON CURRENT FEDERAL AND STATE OF NEW JERSEY DRG REIMBURSEMENT PROGRAMS

The Medical Society of New Jersey had taken a policy position in opposition to the DRG reimbursement system because of a concern over the widespread and premature implementation of a system whose impact upon the quality of care and cost effectiveness of health care had not been appropriately tested.

A major concern to this Society was the inherent potential for a reduction in services and inappropriate reductions in length of stay in an effort to maximize profit from a fixed prospective payment system. This clearly becomes a quality matter and should continue to be monitored.

The Society recognizes that New Jersey, as a unique participant in the system, currently enjoys a payment mechanism different from the national system, partly as a result of reimbursement for uncompensated care, thereby reducing the overall potential for some of the earlier concerns on quality of care. However, this unique status in all likelihood will terminate within three years.

Thus the Society, while recognizing certain potential cost-saving attributes of the DRG system and the value of the current waiver status to New Jersey hospitals, still maintains reservations on the overall impact this system has on quality of care and patient well-being.

The Society recognizes that the Health Department advanced the DRG system as the only means by which to implement the indigent component factor cited in Chapter 83 of the Laws of 1978. This simply is not true. Other reimbursement mechanisms also could have achieved this result. As a matter of fact, the S.H.A.R.E. system which was in place at the time could have been corrected to satisfy the requirements of the 1978 statute. The Department, however, for reasons which are not clear, decided to abandon the S.H.A.R.E. system and to advance the DRG methodology.

The DRG program was an experimental utilization review mechanism. Its developers at Yale University have stated it is being improperly used as a reimbursement system. New Jersey hospitals are now in the process of reducing nursing staffs and curtailing services. Further reductions are forthcoming. New medical technology is not being introduced in this state. Patients are going to out-of-state hospitals to receive the advantages of current diagnostic and treatment technologies.

New Jersey physicians will continue to cooperate with their hospitals regarding DRG, as long as the quality of patient care is not compromised. The Medical Society of New Jersey will continue to monitor the program and offer constructive recommendations, including changes in the prospective payment system, when appropriate, to assure the quality of care to our patients.

RECOMMENDATION

That the House of Delegates adopt the position statement on DRG reimbursement programs.

BOARD ACTIONS:

The Board of Trustees also adopted the following recommendations submitted by the Committee:

1. That the Ad Hoc Committee on Presentation of MSNJ DRG Position be discharged.
2. That an Ad Hoc Committee on Health Care Reimbursement Policies be created.

The Reference Committee **recommends** that the recommendation be approved.

HOUSE ACTION: Not adopted. The amended position statement was adopted by the House.

The Reference Committee **recommends** that the report be filed.

HOUSE ACTION: Filed.

RESOLUTION #7

Introduced by: **Hospital Medical Staff Section**
Subject: **Decision for the Establishment of Facilities To Be the Prerogative of the Hospital Board of Trustees**
Referred to: **Reference Committee "C"**

Whereas, by definition the responsibility of a board of trustees of a not-for-profit hospital is to manage the affairs of the hospital for the benefit of the community; and

Whereas, by definition the board of trustees of a not-for-profit hospital is the primary body accountable for the fiscal integrity of the institution; and

Whereas, the Hospital Medical Staff Section of the Medical Society of New Jersey has adopted the policy that the establishment of facilities should be determined by individual institutions; now therefore be it

Resolved, that the Medical Society of New Jersey adopt and promote the position that in not-for-profit hospitals the facilities be determined by the board of trustees in concert with its medical staff via mutually approved projects; and be it further

Resolved, that the decision for the establishment of hospital facilities then is the sole prerogative of the board of trustees of the individual institution.

The Reference Committee **recommends** that the words "not-for-profit" be deleted from lines 2, 5, and 14.

HOUSE ACTION: Deleted. The words "not-for-profit" were deleted from lines 2, 5, and 14.

The Reference Committee **recommends** that the first **Resolved** be amended to read:

Resolved, that MSNJ adopt and promote the position that facilities in hospitals be determined by its board of trustees in concert with its medical staff via mutually approved projects, acting without interference from regulatory agencies on these determinations.

HOUSE ACTION: Adopted Substitute Resolved.

The Reference Committee **recommends** that the second Resolved be deleted.

HOUSE ACTION: Deleted Second Resolved.

The Reference Committee **recommends** that Resolution #7 be adopted as amended.

HOUSE ACTION: Adopted as amended.

RESOLUTION #8

Introduced by: **Hospital Medical Staff Section**
Subject: **Quality of Medical Records**
Referred to: **Reference Committee "C"**

Whereas, certain fiscal intermediaries and government agency representatives are equating physical findings of allied health personnel to physician findings; and

Whereas, there does not seem to be a unified examination to test competence for allied health personnel; now therefore be it

Resolved, that the Medical Society of New Jersey support the concept that only allied health personnel who have been successfully examined may be allowed to write notes on patient charts; and be it further

Resolved, that the Medical Society of New Jersey develop the criteria and standards which comprise the examination to be taken by allied health personnel who would be authorized to write notes on patient charts.

The Reference Committee feels that the concepts embodied in Resolution #8 certainly are valid; however, their implementation is not the responsibility of the Medical Society of New Jersey.

The Reference Committee **recommends** that Resolution #8 be rejected.

HOUSE ACTION: Not adopted. Resolution #8 was referred back to the Board of Trustees for report back to the 1986 House of Delegates.

RESOLUTION #9

Introduced by: **Bergen County Medical Society**
Subject: **Inappropriateness of DRG Remuneration**
Referred to: **Reference Committee "C"**

Whereas, in spite of the fact that the Medical Society of New Jersey has declared opposition to the DRG concept, it must be noted that this concept has been implemented throughout the country; and

Whereas, under the current DRG concept, inappropriate remuneration occurs in certain instances; and

Whereas, this occurs particularly when two operations are performed at one time and DRG will allow remuneration for only one procedure; and

Whereas, such payment structure places undue economic pressures on hospitals; now therefore be it

Resolved, that the Medical Society of New Jersey study the entire reimbursement schedule of the DRG concept so that corrections can be requested when appropriate.

The general feeling of those in attendance was against adoption of Resolution #9.

The Reference Committee **recommends** that Resolution #9 be rejected.

HOUSE ACTION: Not adopted. Resolution #9 was adopted.

RESOLUTION #11

Introduced by: **Morris County Medical Society**
Subject: **Support for New Jersey's DRG Reimbursement System**
Referred to: **Reference Committee "C"**

Whereas, the state of New Jersey again has been granted a three-year waiver from the federal DRG system; and

Whereas, the physicians in Morris County feel that the New Jersey DRG all-payer system is far superior to and far more equitable than the federal system; and

Whereas, the Medical Society of New Jersey and its component societies will continue to monitor the New Jersey DRG reimbursement system; and

Whereas, the position taken by the House of Delegates of the Medical Society of New Jersey has been one of opposition to the New Jersey DRG reimbursement system; and

Whereas, this opposing position creates a feeling of ill will between the Department of Health and organized medicine; and

Whereas, it is in the interest of the physician members of the Medical Society of New Jersey to cooperate, where possible, with the Commissioner of Health; and

Whereas, according to the Department of Health and the New Jersey Hospital Association, New Jersey DRG has succeeded in a cost-effective manner without compromising the delivery of quality health care; now therefore be it

Resolved, that the Medical Society of New Jersey's position of opposition to the New Jersey DRG reimbursement system be changed to one of active support; and be it further

Resolved, that the Ad Hoc Committee on Presentation of MSNJ DRG Position be discharged.

The general feeling of those in attendance was against adoption of Resolution #11.

The Reference Committee **recommends** that Resolution #11 be rejected.

HOUSE ACTION: Adopted. Resolution #11 was rejected.

RESOLUTION #12

Introduced by: **Union County Medical Society**
Subject: **Compensation at For-Profit Hospital Subsidiaries**
Referred to: **Reference Committee "C"**

Whereas, the unbundling of hospital corporations has resulted in new hospital subsidiaries that are "for-profit" corporations; and

Whereas, the physician's obligation to treat the sick does not include providing free medical services on behalf of "for-profit" corporations; now therefore be it

Resolved, that the Medical Society of New Jersey believes that physicians who provide services to "for-profit" hospital corporations, either in an ongoing advisory or consultative manner, ~~should be compensated adequately for those services~~, should have the right to seek adequate compensation for those services.

The Reference Committee recognized the validity of Resolution #12; however, they felt that the last phrase in the **Resolved** should be changed to "should have the right to seek adequate compensation for those services."

The Reference Committee **recommends** that Resolution #12 be adopted as amended.

HOUSE ACTION: Adopted as amended.

RESOLUTION #14

Introduced by: **Monmouth County Medical Society**
Subject: **Preadmission Review/Certification**
Referred to: **Reference Committee "C"**

Whereas, Preadmission Review/Certification in accordance with Title XVIII of the Social Security Act which applies to Medicare beneficiaries represents a direct reduction of Medicare benefits to citizens insured by Medicare, and since Medicare represents the most significant medical insurance to senior citizens who have paid for these benefits over many years, and has resulted in a situation in which Medicare has replaced most other forms of primary health insurance for senior citizens; and

Whereas, Preadmission Review/Certification is aimed solely at reducing the cost of medical care regardless of concern for the quality of medical care; and

Whereas, Preadmission Review/Certification represents an overt form of discrimination; and

Whereas, in the event the desired cost savings are not achieved through the presently established regulations, these regulations obviously will become more encompassing and restrictive in the future; and

Whereas, Preadmission Review/Certification, if established over a period of time, will become adopted by other third-party forces eventually to require Preadmission Review/Certification of virtually all hospital admissions, contributing to the undermining of the doctor-patient relationship and the demise of the American system of health care delivery resulting in a nationwide rationing of health care, such reduction of health care services producing a threat to the well-being of our patients; now therefore be it

Resolved, that the Medical Society of New Jersey institute an extensive public relations campaign to educate the public as to the dangers inherent in Preadmission Review/Certification; and be it further

Resolved, that the Medical Society of New Jersey advise its members to oppose actively Preadmission Review/Certification; and be it further

Resolved, that the Medical Society of New Jersey investigate, through its legal counsel, the advisability of a legal remedy to the oppressive regulations of Preadmission Review/Certification and institute such a course of action if found to be advisable by the Board of Trustees; and be it further

Resolved, that the Medical Society of New Jersey shall notify all legislative representatives of the state of New Jersey, both on a state and national level, of the Society's strong opposition to Preadmission Review/Certification; and be it further

Resolved, that the Medical Society of New Jersey shall present a similar resolution to the American Medical Association House of Delegates.

The Reference Committee was in agreement with Resolution #14 with the exception that they felt the second **Resolved** should be modified to read:

Resolved, that the Medical Society of New Jersey advise its members to voice opposition to Preadmission Review/Certification; and be it further

The Reference Committee **recommends** that Resolution #14 be adopted as amended.

HOUSE ACTION: Adopted as amended.

RESOLUTION #21

Introduced by: **Essex County Medical Society**
Subject: **Hospital Medical Staff Credentialing of Podiatrists**
Referred to: **Reference Committee "C"**

Whereas, the *Guidelines for a Podiatry Department or Section* adopted by the Board of Trustees of the Medical Society of New Jersey are an invitation for all hospitals fully to open their staffs to another allied health group, regardless of the need of the individual medical staff, hospital, or the community; now therefore be it

Resolved, that the Medical Society of New Jersey ~~not~~ endorse the ~~*Guidelines for a Podiatry Department or Section*~~ as an official policy statement.

There was considerable discussion on Resolution #21. The final conclusion was that since the guidelines adopted by the Board of Trustees of MSNJ are subject to the final decision of each hospital, and since said guidelines were formulated after careful consideration, it was felt that Resolution #21 should not be adopted.

Resolved, that the Medical Society of New Jersey endorse the Ad Hoc Committee of MSNJ and the New Jersey Podiatric Medical Society for resolution of conflicts; and be it further

Resolved, that at the request of any member of either Society the Ad Hoc Committee be utilized to mediate any disagreement in the matter of Level 3 surgery; and be it further

Resolved, that the *Guidelines for a Podiatry Department or Section* be filed.

The Reference Committee **recommends** that Resolution #21 be rejected.

HOUSE ACTION: Not adopted. Substitute Resolution adopted.

RESOLUTION #22

Introduced by: **Richard H. McShane, M.D., Delegate, Essex County**
Subject: **Expert Medical Opinion**
Referred to: **Reference Committee "C"**

Whereas, testimony on behalf of medical plaintiffs, as well as medical defendants, has become an integral part of medical life and is an inescapable part of medical care; and

Whereas, no adequate ethical or legislative guidelines exist with regard to physician conduct when giving medicolegal opinion and/or testimony; and

Whereas, in some instances, a medical expert is shielded from discovery in the early stages of a malpractice action; and

Whereas, the overwhelming majority of these malpractice cases are settled and therefore the expert witnesses remain unknown; and

Whereas, expert witnesses often are given partial or incomplete information from an attorney rather than getting all the information on the case, and this can result in a slanted or ambiguous letter in exchange for substantial remuneration; and

Whereas, the fees paid to a medical expert often come from a portion of the award to the plaintiff; and

Whereas, without guidelines or instructions, physicians both advertently and inadvertently become involved with inappropriate opinions which are discredit to themselves and their colleagues; now therefore be it

Resolved, that the Medical Society of New Jersey advise its members that they should provide expert medical opinion and/or testimony only after a complete and thorough evaluation of all pre- and post-incident records including, but not necessarily limited to, physician office records, hospital records, records of nonphysicians involved in diagnosis or treatment, all x-rays, laboratory data, photographs, and any other information having a bearing on the case. If possible, the physician should examine the patient, pathology specimens, prostheses, and any other medical devices alleged to be contributory to the injury; and be it further

Resolved, that when a medical expert submits a report, the expert should submit a list of documents, data, and items examined that enabled him to arrive at the opinion; and be it further

Resolved, that a no conflict of interest statement ~~be~~ included with the medical expert report; ~~and~~ be it further

Resolved, that ~~a committee of~~ the Society be formed to draw ~~up a~~ code of ethics governing physician conduct as medical experts.

Resolved, that a no conflict of interest statement be included with the medical expert report, i.e. the expert has no vested interest in the outcome and his fee is not contingent upon a successful conclusion to the case.

The Reference Committee felt that Resolution #22 contained implications which demanded the expertise of Legal Counsel.

The Reference Committee **recommends** that Resolution #22 be referred to the Board of Trustees for review and opinion of Legal Council.

HOUSE ACTION: Not adopted. Resolution #22 was adopted as amended by the House of Delegates.

RESOLUTION #25

Introduced by: **Mercer County Medical Society**
Subject: **Medicare Reimbursement**
Referred to: **Reference Committee "C"**

Whereas, on February 16, 1985, the Board of Trustees of the American Medical Association issued a statement on Medicare reimbursement, fee freeze, and needs of low-income Medicare patients; and

Whereas, the Board of Trustees voted: 1) to oppose the freeze on hospital reimbursement; 2) to oppose the continuation of the freeze on physicians' fees; 3) to oppose the freeze on clinical laboratory reimbursement; 4) to encourage physicians to accept Medicare "approved amount" for payment in full for Medicare beneficiaries in financial need; 5) to support an appropriate increase for hospital and physician reimbursement; ~~and the participating Medicare physician;~~ and

Whereas, these positions are fair, equitable, and in the best interest of patient care; now therefore be it

Resolved, that the Medical Society of New Jersey endorse the February 16, 1985, statement of the Board of Trustees of the AMA as representing the position of the Medical Society of New Jersey; and be it further

Resolved, that these positions be promulgated widely to the MSNJ membership, appropriate media, and public officials.

The Reference Committee supported the concept of Resolution #25 but favored the deletion of the words "and the participating Medicare physician" (line 13) and the insertion of the words "and physician" after the word "hospital" (line 12).

The Reference Committee **recommends** that Resolution #25 be adopted as amended.

HOUSE ACTION: Adopted as amended.

RESOLUTION #26

Introduced by: **Mercer County Medical Society**
Subject: **New Jersey PRO Criteria Committee**
Referred to: **Reference Committee "C"**

Whereas, the New Jersey PRO has promulgated preadmission criteria (nursing guidelines) for patients with diabetes, elective cholecystectomy, elective herniorrhaphy, and elective single and double coronary bypass surgery; and

Whereas, the primary purpose of these criteria is to establish fiduciary responsibility for payment; and

Whereas, the Medical Society of New Jersey's Ad Hoc Committee on PRO Criteria has developed criteria which differ from the published criteria of the New Jersey PRO; and

Whereas, despite a liaison to the New Jersey PRO there likely are to be continuing areas of differences related to further criteria as they develop; now therefore be it

Resolved, that the representatives of MSNJ's Ad Hoc Committee on PRO Criteria have input into the New Jersey PRO criteria before they are released; and be it further

Resolved, that criteria promulgated by ~~the New Jersey~~ PRO be ~~appreciated as nursing~~ guidelines for ~~establishing~~ financial responsibility and not intended as standards of medical practice to be met by ~~the physician~~; and be it further

Resolved, that MSNJ's Ad ~~Hoc~~ Committee on PRO Criteria inform all ~~third~~-party carriers of the Society's position on various admission criteria of the New Jersey PRO.

The Reference Committee felt that MSNJ's Ad Hoc Committee on PRO Criteria does not have the authority to transmit MSNJ's position on the subject to outside agencies, but would inform MSNJ's Board of Trustees of its findings. They were of the opinion that the third **Resolved,** therefore, should be deleted in its entirety.

They also felt that the second **Resolved** should be amended to read:

Resolved, that criteria promulgated by the New Jersey PRO be correctly labeled as a protocol to be used by nurse reviewers for establishing financial responsibility, and not intended as standards of medical practice to be met by physicians.

The Reference Committee **recommends** that Resolution #26 be adopted as amended.

HOUSE ACTION: Adopted as amended.

RESOLUTION #28

Introduced by: **Charles Harris, M.D., Delegate, Ocean County**
Subject: **Documentation of Medication Errors**
Referred to: **Reference Committee "C"**

Whereas, the medical chart of a hospitalized patient constitutes a legal document; and

Whereas, doctors' orders on the chart constitute the basis of reviewing the case and often the basis of litigation; and

Whereas, there is no requirement that nurses document on the chart reasons for errors in the administration of medication, i.e., wrong medication, wrong dosage, or failure to administer medication; and

Whereas, this failure can invalidate the proper reconstruction of the medical record for hospitalized patients; and

Whereas, the State Board of Nursing steadfastly refuses to create a rule requiring nurses to document on the chart reasons for errors in the administration of medications; now therefore be it

Resolved, that the Medical Society of New Jersey petition the State Board of Nursing to create a rule requiring nurses to document on medical charts of hospitalized patients errors (of omission or commission) in the administration of medication; and failing that; be it further

Resolved, that the Medical Society of New Jersey strongly support the efforts of State Senator Leonard T. Connors, Jr., to introduce such legislation.

There was no strong feeling either for or against Resolution #28 expressed by those present. The Reference Committee concluded that the author's intent was not clear, and that such documentation basically is each hospital's responsibility. The Reference Committee favored rejection of the Resolution.

The Reference Committee **recommends** that Resolution #28 be rejected.

HOUSE ACTION: Adopted. Resolution #28 was rejected.

RESOLUTION #29E

Introduced by: **Union County Medical Society**
Subject: **Scheduling of PRO Appeals**
Referred to: **Reference Committee "C"**

Whereas, denials under the PRO mechanism are becoming much more frequent; and

Whereas, physician opportunities for PRO appeal hearings are restricted by the apparent inability of the PRO to give sufficient notice of the appeal date; now therefore be it

Resolved, that the Medical Society of New Jersey prevail upon the PRO to schedule appeal hearings with the convenience of the appealing physician in mind, and that the date for such hearing be discussed with the appealing physician in the first week of the 30-day appeal period rather than the last week; and be it further

The Reference Committee, recognizing the fact that coordination of events leading up to PRO appeal hearings is necessary, suggests the addition of a second **Resolved** after the addition to last line of the words "; and be it further";

Resolved, that the New Jersey Hospital Association urge its members to forward copies of hospital records to PRO at the time the appeal is requested. ~~and further, to urge the PRO not to start the appeal process until all records have been received by that organization.~~

The Reference Committee **recommends** that Resolution #29E be adopted as amended.

HOUSE ACTION: Adopted as amended by the House of Delegates.

RESOLUTION #30E

Introduced by: **Union County Medical Society**
Subject: **Prior Approval for Admission and/or Procedures for Patients**
Referred to: **Reference Committee "C"**

Whereas, General Motors has adopted an insurance plan through their various state Blue Shield carriers which requires prior approval for hospital admission and for certain outpatient procedures (as yet unknown); and

Whereas, this is the second fee-for-service carrier to impose prior approval restrictions upon the medical profession; and

Whereas, such prior approval substitutes generalized diagnoses for the selective and personal medical judgment of an individual physician treating an individual patient; now therefore be it

Resolved, that the Medical Society of New Jersey formulate a document for patients to sign indicating that if permission in a "prior approval plan" is denied for procedures and/or admissions, the physician is not responsible for any untoward results; and be it further

Resolved, that Medical Society of New Jersey members be urged to make a note in their office record that they are not in agreement with the position of the carrier regarding the care of the patient.

The Reference Committee **recommends** that Resolution #30E be adopted with the addition of a third **Resolved:**

Resolved, that MSNJ seek to have legislation enacted to hold the attending physician blameless for any harm to a patient occurring as a consequence of the PRO's refusal to authorize hospitalization.

HOUSE ACTION: Adopted as amended.

REFERENCE COMMITTEE "D"

Reports: ***COUNCIL ON LEGISLATION***
COUNCIL IN PUBLIC RELATIONS
BOARD OF TRUSTEES' ITEMS
RESOLUTIONS #16, 18, 23, 24

Members:
Frank R. Romano, Sr., M.D., Chairman, Union
David J. Blackman, M.D., Passaic
G. Gerson Grodberg, M.D., Bergen
Lindsay L. Pratt, M.D., Camden
Herman M. Robinson, M.D., Essex
Lawrence Frieman, M.D., Alternate, Monmouth

LEGISLATION

IRVING P. RATNER, M.D., CHAIRMAN, WILLINGBORO
(Reference Committee "D")

This report presents a summary of the status of legislative measures of primary concern during the First Annual Session of the 201st Legislature. The Council's operations, together with a cumulative report of MSNJ's official positions on current legislation, are reflected regularly in the official bulletins dispatched to state legislative keymen and to component societies, and in items published in the *Membership Newsletter* and *The Journal.*

The Council on Legislation continues its established policy of inviting an official representative from each specialty society to all Council meetings. A notice announcing the date of each of the Council's meetings also is sent to all MSNJ official intermediaries with New Jersey specialty societies.

The Council urges that more representatives attend its meetings so that it may have the benefit of the timely thinking of specialty societies concerning proposed legislation affecting the specialty fields.

The Council on Legislation agreed, in order to fortify our stand on legislative bills and make our position known throughout the Society, that it be a standing policy to invite the chairman of each council and standing committee to attend the legislative meetings and to give them the right, if they cannot attend, to select a representative. A recent Bylaw amendment makes it possible for one Auxiliary member to be appointed, by the President, to serve on the administrative councils and committees for a one-year term to be full voting members of the respective councils and committees.

Of the bills reported to the House from the First Session of the 201st Legislature the following were signed in law:

APPROVED

S-1044; S-1100; A-985—Provides that nursing homes may be compensated by Medicaid for reserving beds for ten days for patients who have been transferred to acute care facilities.

A-551—Allows mobile intensive care nurses and paramedics to perform advance life-support services as authorized by the Commissioner of Health where direct communication from a physician or a physician-directed nurse is maintained. If communication is lost, provision is made for the nurse or paramedic to provide procedures approved by the Commissioner of Health.

A-820—Prohibits the use of deductibles and copayments by Medicaid unless required by the federal government.

ACTIVE SUPPORT

A-2304—To require that the driver and passengers in the front seat of an operating passenger automobile wear the safety seat belt provided.

DISAPPROVED

A-160—Mandates Medicaid coverage of drug abuse treatment ordered by a physician and rendered in a state-approved facility.

A-1372—Expands hypertension screening and control programs being conducted in New Jersey.

ACTIVE OPPOSITION

A-1471—Requires written consent for breast biopsy and/or repair. Physicians that do not secure written consent are subject to discipline by the SBME.

The following bills of medical interest were introduced in the 1984 Legislature, but too late to be reported to the 1984 House of Delegates:

CURRENT LEGISLATION (1984)

S-331—Lynch—Medicaid. Requires Medicaid to provide treatment for patients that are drug abusers. The treatment must be prescribed by a physician and provided in an approved facility. **Approved.**

S-629-Bassano—Immuno-Augmentative Therapy (I.A.T.) and S-1127-Costa—Immuno-Augmentative Therapy (I.A.T.). Permits the use of I.A.T. when prescribed by a licensed physician. No institution may prohibit its use. A statutory form of informed (consent) request is established and must be filed with the institution and the Department of Health. The Commissioner of Health is to report to the Governor annually about the number of cases and their status. **Disapproved—with Active Opposition if the bill moves.** There is no documented evidence that I.A.T. is effective in the treatment of any type of cancer and its use may cause delay in receiving the appropriate, proved treatment methods.

S-1177-Gagliano—Jury Duty. Revises the jury selection system in New Jersey. Every citizen of the United States over the age of 18 and residing in New Jersey will be placed on the pool list. Existing exemptions for police, fire, health care personnel, etc. are repealed. **Disapproved,** because inclusion of health care professionals will cause unwarranted disrup-

tion in the provision of health care services to the ill and injured residents of New Jersey.

S-1287-Gagliano—Criminal Responsibility. Abolishes insanity as a defense. Allows mental health to be considered a mitigating factor in sentencing. **Action Deferred,** pending further information from the Council on Mental Health.

S-1295-Lynch—Athletic Trainers. Licenses athletic trainers through the State Board of Medical Examiners. They can provide physical treatment modalities ordered by a licensed physician. They must be employed by a school, college, university, or professional team. **No Action.**

S-1342-Lesniak—Pesticides. Regulates the manufacture, use, and disposal of pesticides. Authorizes and directs the Department of Environmental Protection to prevent the contamination of water supplies. **Approved.**

S-1504-Graves—Lead Poisoning (same as A-1048). Requires the Department of Health to screen high-risk children between the ages of one and five years for lead poisoning. A similar bill passed the legislature last year, but was conditionally vetoed by the Governor. His concerns have been addressed in **S-1504. Approved.**

S-1513-Codey—Medicaid. Prohibits administrators of nursing homes from requiring incoming patients or their families to sign agreements to stay as private patients when they are eligible as Medicaid patients. Also, prohibits the divesting of assets within 24 months of an application for Medicaid eligibility. **Disapproved.** Medicaid payments to hospitals are based on the same rates as those paid by or, on behalf of, all other patients. Medicaid payments to nursing homes are below the rates fairly charged to other patients. As a result of Medicaid patients not paying a fair rate, all other patients are charged more. Medicaid patients and families with assets should make a contribution to a fair rate.

S-1515-Codey—Nursing Homes. Prohibits nursing homes from refusing to accept Medicaid recipients if their occupancy level is below the statewide average as calculated by the Commissioner of Human Services. Exceptions can be granted based upon bed capacity and financial status of the institution. **No Action.**

S-1534-Cowan—Antitrust Immunity. Expands immunity from antitrust suits to licensing boards to include their actions regarding admittance to a profession, suspension, and revocation of licenses. **Disapproved,** because members of licensing boards should continue to be legally responsible for their decisions and actions. (Doctors Lehr, Allen, Salerno, and Sachs voted for an upgraded position of Active Opposition and requested to be so recorded.)

S-1557-Russo—Wrongful Death of Minors-Damages. Permits awarding compensatory damages in cases of wrongful death of minors. There would be a limitation of $100,000. (Current law limits these awards to pecuniary loss, together with established special damages.) **Disapproved,** because only damages established by proof should be subject to award. Supreme Court decisions in New Jersey have established a reasonable and workable format for awarding damages in wrongful death actions. This bill would create an unwarranted expansion and escalate the cost of casualty insurance without any benefit to the public.

S-1584-DiFrancesco—Abuse of Elderly Disabled or Incapacitated Persons. Requires every person who has reasonable cause to believe an elderly or disabled person is the victim of abuse or exploitation to report that information to the Commissioner of Human Services or his designee. **Approved.**

S-1650-Ewing—Biotechnology (same as A-1764). This bill establishes the Advanced Technology Center in Biotechnology on the adjoining campuses and under the joint governance of Rutgers, The State University, and UMDNJ. The purpose of establishing this center is to promote the development of biotechnology research, and to stimulate additional job opportunities and new business in this state. This bill implements Recommendation 1 of the report of the Governor's Commission on Science and Technology. **Approved.**

S-1654-Ewing—Science and Technology (same as A-1767). This bill creates a NJ Commission on Science and Technology in the Department of Commerce and Economic Development. This bill implements Recommendation 38 of the report of the Governor's Commission on Science and Technology. This new agency will have the responsibility for formulating long-range plans and programs for science and technology in New Jersey. **Approved.**

S-1714-Bassano—Podiatric X-Ray Technicians. Licenses podiatric x-ray technicians and allows them to take x-rays of the "leg" and foot area." Their curriculum and examination will be established and conducted by the Radiologic Technology Board of Examiners. *Note: Current law limits the podiatrist to the "lower leg" and foot. **Active Opposition.** This legislation is inferior to **S-515** which, adequately, addresses the issue.

S-1717-Lynch—Education Bond Fund. Creates an $80 million bond fund to finance the construction of a network of Advanced Technology Centers at private and public institutions of higher education. **Approved.**

S-1720-Bassano—Marriage Certificates. Requires all female marriage license applicants under age 45 to undergo rubella testing in addition to serological testing. **Conditional Approval,** pending amendment "that this bill will expire in ten years."

S-1721-Bassano—Rh Testing. Requires every physician attending a woman at the time of delivery, miscarriage, abortion, or during the prenatal period to secure an Rh test. If the test is Rh negative the physician shall, within 24 hours of receipt of the results, advise the woman of its significance and the availability of preventive treatment. **Disapproved,** as unnecessary legislation and the practice of medicine by legislation. This procedure already is being done in physicians' offices and should remain a matter within the professional judgment of the physician.

S-1756-McManimon—Acupuncture (same as A-2025). Provides that acupuncturists licensed in another state shall be eligible immediately for appointment to the Acupuncture Examining Board. **No Action.** Law c.76 ('84)

S-1775-Orechio—Chiropractic. Allows chiropractors who are licensed to practice by written examination in any state and who have completed 4,300 classroom hours in a chiropractic school to become licensed to practice by virtue of a clinical examination. **Active Opposition.** Current law (which now is within the purview of the State Board of Medical Examiners) is preferable to this legislation.

S-1828-O'Connor—Licensing of Dietitians and Dietetic Technicians (same as A-2070). Requires the licensing of dietitians and dietetic technicians through the State Board of Dietetics. Dietetics is defined as the application of the principles of the science of food and nutrition for the development and management of nutrition services to attain and maintain health. It includes evaluation and consultation. **Approved.**

S-1839-Dalton—Guardianship. Amends existing law to allow a psychologist to supply evidence of a need for guardianship of a minor who is in the custody of the Division of Mental Retardation. **Active Opposition.** Decisions of this nature should be made under the supervision of a psychiatrist not a clinical psychologist.

S-1840-Cardinale—Certificate of Need. Exempts the private practice of medicine from the certificate of need law. **Active Support.**

S-1846-Garibaldi—Disability. Provides that cancers caused by exposure to heat, cold, radiation, or a known carcinogen which manifest themselves in active police and firemen are assumed to be accidental and work-related disabilities. **Active Opposition.** This legislation is an intrusion on the private practice of medicine and improperly and incorrectly produces a diagnosis by legislation.

S-1854-Cardinale—Dental X-Rays. Requires any person x-raying the mouth or teeth of patients to shield the area, from the upper neck to mid-thigh, with a lead apron or other protective garment. **Approved.**

S-1890-Rand—Education and Research. Appropriates $6.2 million to move the Institute for Medical Research into UMDNJ-Camden. **No Action** (pending review of the Report of the Special Department of Higher Education Committee appointed to evaluate this project).

S-1906-Graves—Motor Vehicle Vision Examinations (same as A-2192). Provides that a licensed ophthalmic dispenser may certify successful completion of the required visual examination for an operator's license. **Disapproved, with Active Opposition if the bill moves,** because the motorists may feel they are receiving a quality eye examination when,

in fact, the examination merely consists of an eye chart reading test and a test for peripheral vision and depth perception.

S-1920-O'Connor—No-Fault Medical Expense. Prohibits auto insurers from issuing policies to an insured who has elected a medical expense benefit deductible unless the insured supplies proof to the insurer that he is covered for medical expenses under an alternative health insurance plan. **No Action.**

S-2005-Codey—Youth Suicide. Establishes a youth suicide prevention demonstration program within the Department of Education. Guidelines established by the Department will be administered by local boards of education and community mental health service providers. **Conditional Approval,** provided the bill is amended to read "in cooperation with local psychiatric and mental health resources."

S-2018-Dorsey—Genetic Engineering of Microorganisms. Creates a 24-month ban on the release of genetically engineered microorganisms into the environment. Established a commission to study the problem and propose solutions. **Action Deferred,** pending further information from MSNJ's Council on Public Health, the New Jersey Health Science Group, and the Department of Health's Division of Epidemiology and Disease Control.

S-2019-Lynch—Dispensing of Contact Lenses. Creates the profession of contact lens dispensing and fitting for nonphysicians and nonoptometrists. Licensure and regulation would be through the Board of Examiners of Ophthalmic Dispensers and Ophthalmic Technicians. A prescription by a licensed optometrist or physician would be required. **Active Opposition,** to that portion of the bill referring to the fitting of contact lenses, because MSNJ does not feel it would be beneficial to the health of the consumer. Contact lenses improperly used or fitted may cause irreparable damage to the cornea. The fitting of contact lenses should be done by the prescribing ophthalmologist or optometrist.

S-2023-Cardinale—Automobile Insurance. Creates a study commission to ascertain whether no-fault insurance should be replaced by a system of compensation patterned after workmen's compensation. **No Action.**

S-2044-Lesniak—Mandatory Use of Seat Belts. To require that the driver and passengers in the front seat of an operating passenger automobile wear the safety seat belt provided. **Active Support.**

S-2051-Feldman—Medical Education. Appropriates $9.45 million to design an osteopathic medical school in Stratford. Also, provides construction monies for classrooms and administrative offices. **Active Opposition,** because there is no need for the development of a separate osteopathic school for the training of medical students in the state of New Jersey and New Jersey is facing an oversupply of physicians.

S-2088-Cowan—Medical Education. Authorizes the State Board of Higher Education to contract with an out-of-state medical school to accept two to four minority students per class. Following licensure, the students must serve three years in a medically underserved area of New Jersey. **Disapproved.** The purpose of this bill can best be resolved by utilizing educational facilities within the state.

A-524-Weidel—Life-Sustaining Procedures. Provides that terminally ill patients may direct their physicians, through a written document to withhold or withdraw mechanical or artificial means to sustain or supplant vital function when those acts only artificially will prolong death. The directive shall comply with statutory form. The physician relying upon it shall determine it complies with the statute. **No Action** (refer to the Committee on Biomedical Ethics for report back to the Council on Legislation at its October meeting.)

A-1048-Villane—Lead Poisoning (same as S-1504). Requires the Department of Health to screen high-risk children between the ages of one and five years for lead poisoning. A similar bill passed the legislature last year, but was conditionally vetoed by the Governor. **Approved.**

A-1438-Schwartz—Athletic Trainers. Same as **S-1295** with minor differences. **No Action.**

A-1539-Doyle—Acupuncture. Creates a separate Acupuncture Examining Board with regulatory authority. **No Action.**

A-1559-Garvin—Breast Cancer-Informed Consent. Requires the Department of Health and the State Board of Medical Examiners to prepare a booklet on all aspects of the treatment of breast cancer. Attending physicians are required to distribute the book to appropriate patients and to discuss it with them. **Active Opposition.** Physicians have the medical-legal obligation to secure informed consent from all their patients regardless of the condition involved. The legislature should not become involved in specific acts of medical judgment and patient information. These must be developed by science, education, and standards of practice. If codification is necessary, that is a function of the appropriate regulatory agencies.

A-1677-Bryant—Medical Education. Provides for the Chancellor of Higher Education to contract with Meharry Medical College and School of Dentistry, located in Nashville, Tennessee, to export five to ten medical students and three to five dental students into each Meharry class. Admission will be solely on academic merit. Students shall come from a disadvantaged or minority background. **Disapproved.** The purpose of this bill can best be resolved by utilizing educational facilities within the state.

A-1682-Muhler—Psychiatric Review—Criminally Insane. Creates a seven-person Board within the Department of Human Services vested with the authority to release or continue the commitment of persons who were found incapable of standing trial or not guilty by reasons of insanity. A Superior Court judge currently makes these decisions. **Active Opposition.** This authority should remain within the jurisdiction of the Superior Court judge. The Court is more experienced in objectively evaluating the evidence presented and the needs of the individual and society in general.

A-1688-Shusted—Anatomical Gifts. Requires hospitals to ascertain, whenever possible, whether a patient has made an anatomical gift and to make that information a part of the record. **No Action.**

A-1764-Gill—Biotechnology. This bill establishes the Advanced Technology Center in Biotechnology on the adjoining campuses and under the joint governance of Rutgers, The State University, and UMDNJ. The purpose of establishing this center is to promote the development of biotechnology research, and to stimulate additional job opportunities and new business in this state. This bill implements Recommendation 1 of the report of the Governor's Commission on Science and Technology. **Approved.**

A-1767-Gill—Science and Technology. This bill creates a New Jersey Commission on Science and Technology in the Department of Commerce and Economic Development. This bill implements Recommendation 38 of the report of the Governor's Commission on Science and Technology. This new agency will have the responsibility for formulating long-range plans and programs for science and technology in New Jersey. **Approved.**

A-1768-Gallo—Hemophilia. Requires all hospital service contracts to include services and products rendered at home under the supervision of a state-approved hemophilia treatment center. **Approved.**

A-1787-Gallo—Hemophilia. Same as **A-1786,** applies to group health insurance contracts. **Approved.**

A-1788-Gallo—Hemophilia. Same as **A-1787,** applies to individual health insurance contracts. **Approved.**

A-1829-Otlowski—Medicaid. Prohibits families from encouraging elderly relatives to divest assets in order to become Medicaid eligible. Prohibits hospitals, nursing homes, and intermediate care facilities from receiving contributions from Medicaid-eligible individuals or their families at any time. Prohibits a skilled nursing facility (SNF) or intermediate care facility (ICF) from denying admission on the basis of Medicaid coverage. (The Commissioner of Human Services may make particular exceptions based on capacity or financial condition of the facility.) Prohibits the SNF and ICF from leveraging private pay status via contract prior to acceptance as a Medicaid patient. **Action Deferred.** Recent amendments to the bill were not available for Council review. This bill, therefore, is referred directly to the Board of Trustees, in amended form, for their consideration and action.

A-1840-Kern—Wrongful Death. Requires that when a wrongful death settlement is "structured," the Court will determine prior to the settlement who will receive and in what proportions. **No Action.**

A-1854-Gallo—Alzheimer's Disease. Increases the legis

lative members on the Alzheimer's Commission to give them a majority. **No Action.**

A-1870-Garvin—Motor Vehicles. Amends existing statutes to require either seat belts or restraint systems for all children under ten traveling in a motor vehicle. Current law applies to children under age five. **Active Support.**

A-1881-Perun—Insurance Coverage of Organ Transplants. Requires medical service corporations to provide coverage for transplant procedures in their contracts. **No Action.**

A-1882, A-1883, A-1884, A-1885-Perun—Organ Transplant. Requires health insurers and HMOs to cover organ transplants in their contracts. **No Action.**

A-1921-Miller—Professional Liability-Statute of Limitations. Establishes a 3-year statute of limitations in tort actions against health care providers. Children would have until age 11 to bring an action for injuries prior to age 8. After age 8 they come under 3-year standard. Fraud concealment, and unintentional foreign bodies "toll" the statute. **Active Support.**

A-1922-Miller—Professional Liability-Affidavit of Merit. Provides that within 60 days of filing a medical malpractice complaint, the plaintiff must supply an affidavit, by a qualified expert, that reasonable cause exists to believe malpractice occurred. **Active Support.**

A-1924-McEnroe—Nurse-Midwife. Requires the Commissioner of Health to establish a nurse-midwife prenatal demonstration project at East Orange General Hospital in accordance with guidelines established by the Commissioner. **Action Deferred,** pending further information from the Essex County Medical Society.

A-2070-Muhler—Licensing of Dietitians and Dietetic Technicians (same as S-1828). Requires the licensing of dietitians and dietetic technicians through the State Board of Dietetics. Dietetics is defined as the application of principles of the science of food and nutrition for the development and management of nutrition services to attain and maintain health. It includes evaluation and consultation. **Approved.**

A-2115-Otlowski—Use of Drugs by Optometrists. Permits optometrists to use topical drugs for treatment and diagnostic purposes. **Active Opposition.** Optometrists are not medical doctors and, therefore, should not be given the mandate, via legislation, to administer drugs. If the wrong medication is prescribed, what could appear to be a simple problem could develop into destructive process of the eye in a very short period of time. The bill is short-sighted in attempting to provide lesser cost care to the general public at the expense of the quality.

AR-25-Rocco—Nonviable Human Fetuses. Requests the Department of Health to strictly enforce its regulations regarding the disposal of nonviable human fetuses. **No Action.**

AR-31-Herman—Smoking. Requests the Commissioner of Health to vigorously educate the public, particularly young people, about the dangers of cigarette smoking. **Active Support.**

AR-62—Felice. An Assembly Resolution memorializing the Congress of the United States to enact legislation to extend to January 1, 1986, New Jersey's Medicare waiver which allows the state to set hospital rates for the Medicare and Medicaid programs. **No Action.**

A-1918-Miller—Damages in Personal Injury and Wrongful Death. Provides that collateral sources of payment shall be used to offset damages. Further provides structured payments may be used at the request of either party if the future damages exceed $100,000. **Active Support.**

A-1919-Miller—Limitation of Personal Injury Damages. Provides a $100,000 cap on damages for pain and suffering to personal injury actions. **Active Support.**

A-1924-McEnroe—Nurse-Midwife. Requires the Commissioner of Health to establish a nurse-midwife prenatal demonstration project at East Orange General Hospital in accordance with the guidelines established by the Commissioner. **No Action.**

A-2001-Doria—Limited X-Ray Technologists. Provides for the licensing of limited x-ray technologists to perform podiatric studies. **Disapproved.** This legislation is inferior to **S-515** which, adequately, addresses the issue. Law c. 242 ('84)

A-2106-Paterniti—Nursing Homes. Requires nursing homes with 100 beds or more to dedicate 10 percent of bed capacity to indigent, 10 percent to complex care, and 10 percent for medical day-care services. **Active Opposition.** This legislation fails to recognize the responsibility of the state of New Jersey concerning its indigent patients and further disrupts the management of institutions by creating quotas and rationing beds and services.

A-2122-Cooper—Seat Belts/School Buses. Establishes seating restraint and emergency exit requirements for school buses. **Active Support.**

A-2129-Walker—Infant Mortality. Creates an infant mortality prevention program in the Department of Health to provide obstetrical and prenatal services to women with high-risk pregnancies. Also provides postpartum followup services. Seven hospitals are designated by statute with three to be added by the Commissioners. Four million dollars is appropriated. **Action Deferred,** pending further information from MSNJ's Committee on Maternal and Child Care.

A-2140-Rooney—Juvenile Offenders. Provides that a judge may order a juvenile offender to be examined by a physician, optometrist, or audiologist. **Action Deferred,** pending further information from the NJ Chapter/American Academy of Pediatrics, the NJ Academy of Family Physicians, and the NJ Academy of Ophthalmology and Otolaryngology for report back to the Council at its next scheduled meeting.

A-2184-Muhler—Good Samaritan. Requires persons at the scene of accidents or emergencies to render reasonable assistance. **No Action.**

A-2192-Penn—Motor Vehicle Vision Examination (same as S-1906). Provides that a licensed ophthalmic dispenser may certify successful completion of the required visual examination for an operator's license. **Disapproved—with Active Opposition if the bill moves,** because the motorists may feel they are receiving a quality eye examination when, in fact, the examination merely consists of an eye chart reading test and a test for peripheral vision and depth perception.

A-2214-Bryant—Medical Research (same as S-1890). Appropriates $6.2 million to move the Institute for Medical Research into UMDNJ-Camden. **No Action,** pending review of the Report of the Special Legislative Committee appointed to evaluate this project.

A-2276-Perun—PMS/Premenstrual Syndrome. Establishes a program of research at UMDNJ-New Brunswick to study the causes of premenstrual syndrome and develop effective methods for treating and preventing this condition. **No Action.**

A-2286-Otlowski—Suicide Prevention. Establishes an Advisory Council and pilot program in the Department of Human Services for teenage suicide prevention. Eighty thousand dollars has been appropriated. There is no requirement of physician participation on the Advisory Council. **Disapproved,** in favor of **S-2005.**

A-2293-Kalik—Osteopathic Education. Appropriates $9.45 million for the UMDNJ Osteopathic School in Stratford. **Active Opposition,** because there is no need for the development of a separate osteopathic school in the state of New Jersey and New Jersey is facing an oversupply of physicians. Law c.4 ('85)

A-2304-Brown—Mandatory Use of Seat Belts. To require that the driver and passengers in the front seat of an operating passenger automobile wear the safety seat belt provided. **Active Support.**

A-2406-Shusted—Hemodialysis Technician. Hemodialysis technicians would work under the supervision of physicians. This legislation would establish 1) guidelines for training and education; 2) guidelines for recognized testing and certification procedures; and 3) guidelines to define the role and responsibilities of the hemodialysis technician. **Action Deferred,** pending further information from John P. Capelli, M.D., Chairman, NJ Renal Physicians Association, and Richard Goldstein, M.D., Commissioner of Health, for report back to the Council at its next meeting.

At 12 o'clock noon, Tuesday, January 8, 1985, the Senate and General Assembly met for organization of the Second Annual Session of the 201st New Jersey State Legislature. As the Legislature presently is constituted, the Senate has a total of 40 members consisting of 17 Republicans and 23 Democrats. The Assembly has a total of 80 members consisting of 35

Republicans, 44 Democrats, and 1 vacancy. By means of official legislative bulletins, the Society's official legislative positions on all current state legislation regularly are called to the attention of legislators as well as component societies, cooperating agencies, county keymen, county society executive directors and executive secretaries.

The Society has adopted the following regular range of official positions concerning proposed legislation:

Watch List—For all approved/disapproved legislation.

Active Support—All-out support for the measure.

Active Opposition—All-out opposition for the measure.

Note & File—For all **No Action** legislation.

Conditional Approval—To indicate that the approval of the Society is conditional, subject to elimination of the unsatisfactory elements of the bill that are pointed out.

Action Deferred—Pending amendment that will have substantial impact on **Active Support/Active Opposition** legislation.

CURRENT LEGISLATION (1985)

S-2011-Ewing—Community Mental Health Centers. Appropriates $1.38 million for the UMDNJ community health centers at Newark and New Brunswick. **No Action.**

S-2098-Rand—Cancer Research. Extends the scope of research projects that may be conducted by the State Commission on Cancer. **No Action.**

S-2116-Bassano—Abortion. Requires physicians to inform women undergoing abortions of the availability of fetal anesthesia whenever the fetus to be aborted is viable (i.e. able to live outside the womb with or without artificial means of support). The act is not applicable during an emergency, or if the anesthesia decreases the possibility of survival of the fetus, or if the anesthesia to the mother also will abolish organic pain to the aborted fetus. **Disapproved, with Active Opposition if the bill moves.** This bill encourages abortion in the third trimester, which is contrary to the accepted standards of practice and presents unacceptable dangers to patients.

S-2134-Garibaldi—Prader-Willi Syndrome. Requires the state to conduct an exhaustive study of Prader-Willi syndrome including an assessment of available services. A report with findings, conclusions, and recommendations is to be submitted to the Governor and legislature within two years. **Disapproved,** because there has been no evidence submitted to determine the frequency of this disease, its coverage under current insurances, and what the rating impact of mandated benefits would be.

S-2142-Hurley—Disposal of Hypodermic Syringes. Permits the needle or syringe to be discarded as a single unit without recapping. The container shall be destroyed by grinding, crushing, or incineration. Present law requires that a needle be removed from the hub and the syringe mangled and melted. **Approved.**

S-2150-Jackman—Fetal Tissue (A-2584). Requires that the remains of any fetus of less than 20 weeks be disposed of by interment. **Action Deferred,** pending further information from the New Jersey Obstetrical and Gynecological Society, Pathology Society of New Jersey, and MSNJ's Committee on Maternal and Child Care.

S-2159-Hagedorn—Involuntary Commitments. Substantially alters the involuntary commitment law. Significantly, certification may be effected by psychologists, nurses, or social workers who have conducted an examination of the person within the three days prior to certification. **Active Opposition,** because this legislation would not improve the present mechanism and, by creating another level of service, would tend to increase mental health delivery costs in New Jersey.

S-2172-Connors—Fetal Tissue (A-2477). Authorizes the incineration of fetal tissue of less than 20 weeks' gestation by individuals licensed through the State Department of Health. **Action Deferred,** pending further information from the New Jersey Obstetrical and Gynecological Society, Pathology Society of New Jersey, and MSNJ's Committee on Maternal and Child Care.

S-2282-Ewing—Professional Licensing. Creates a commission to advise the Governor and the legislature regarding any proposals to regulate or license new professions. **Approved.**

S-2330-Foran—Emergency Services. Would allow a paramedic or registered nurse with special training, to ride with an EMT unit and perform advanced life-support services. **Action Deferred,** pending further information from the New Jersey Nurses Association and MSNJ's Committee on Emergency Medical Care.

S-2347-Lipman—Adolescent Pregnancy. Establishes a Task Force on Adolescent Pregnancy to compile and study information on current programs in order to recommend statewide programs to combat adolescent pregnancy. **Conditional Approval,** pending the inclusion of physician representation from the New Jersey Obstetrical and Gynecological Society, the New Jersey Chapter, American Academy of Pediatrics, and the New Jersey Academy of Family Physicians.

S-2361-Costa—Aides in Nursing Homes. Authorizes the Department of Health to certify aides in long-term care facilities pursuant to completion of an approved training course and passing of an examination. **Disapproved, with Active Opposition if the bill moves.** There is no demonstrated need for the certification of these aides and such a system will produce increased costs.

S-2365-Hagedorn—Medicaid Long-Term Care. Increases Medicaid reimbursement to intermediate and long-term care facilities based upon their Medicaid census. **Approved.**

S-2379-Costa—Consults. Provides that consulting physicians are not to be reimbursed unless the patient has agreed, in writing, prior to the consultation. Substantial incapacity of the patient and mandatory consultations as a result of law, hospital rule, or insurance contract are excepted. **Active Opposition,** because this bill presents an unworkable situation in acute care hospitals. Written consent of the patients cannot always be secured. This bill would increase delays and discourage the prompt use of consultations and the efficient management of health care services.

S-2387-Feldman—Terminal Illness. Provides a person may execute a document withholding or withdrawing life-sustaining procedures if the person has been diagnosed and certified by two physicians as suffering from a terminal illness. The attending physican would be expected to honor the request of the patient. There also is a proviso for an oral declaration. **Action Deferred,** pending further information from MSNJ's Committee on Biomedical Ethics.

S-2485-Bassano—Smoking/Public Places. Grants owners of buildings and businesses open to the public the ability to regulate smoking within their premises. **Active Support.**

S-2487-Dalton—Smoking/Workplace. Requires employers to establish written policies to control smoking in the work environment. **Active Support.**

S-2488-Contillo—Smoking/Government. Requires government supervisors to establish written policies to control smoking in government buildings. **Active Support.**

S-2489-Graves—Smoking/Public Conveyances. Prohibits smoking in public conveyances. **Active Support.**

A-27-Gill—Blood Donations. Provides that a person who makes a blood donation when he knows he is infected with a communicable disease shall be guilty of a fourth degree crime. **No Action.**

A-2129-Walker—Infant Mortality. Creates an infant mortality prevention program in the Department of Health to provide obstetrical and prenatal services to women with high-risk pregnancies. Also provides postpartum followup services. Seven hospitals are designated by statute with three to be added by the Commissioners. Four million dollars is appropriated. **Approved.**

A-2140-Rooney—Juvenile Offenders. Provides that a judge may order a juvenile offender to be examined by a physician, optometrist, or audiologist. **Active Opposition,** because there is no accepted scientific correlation between visual acuity problems and juvenile delinquency.

A-2406-Shusted—Hemodialysis Technicians. Hemodialysis technicians would work under the supervision of physicians. This legislation would establish 1) guidelines for training and education; 2) guidelines for recognized testing and certification procedures; and 3) guidelines to define the role and responsibilities of the hemodialysis technician. **Action Deferred,** pending further information from other approved renal dialysis units in order to ascertain their staffing protocol procedures.

A-2426-Cooper—Health Insurance. Eliminates the exclusion from health insurance of second surgical opinion programs and pregnancy related sterilizations. **No Action.**

A-2469-Miller—Child Abuse Prevention. Creates a 24-member commission to study the problem of child abuse and to recommend methods of prevention. **Approved.**

A-2470-Felice—Child Abuse. Requires boards of education to establish public education programs to instruct parents, teachers, and others in the detection of, and response to, signs of child abuse. **Approved.**

A-2471-Haytaian—Child Abuse Prevention Registry. Creates a registry within the Division of Youth and Family Services (DYFS) of persons convicted of, or charged with, child abuse. The DYFS shall develop guidelines for obtaining and releasing the information collected. **Approved.**

A-2472-Haytaian—Child Abuse Parental Assistance. Directs the Department of Human Services to establish treatment and education programs for parents who have abused their children. **Approved.**

A-2473-Haytaian—Child Care Employees. Provides that any person who has been convicted of child abuse or violent crimes against adults shall not be employed in a position which places them in routine contact with children. **Conditional Approval,** pending amendment to Section 3 of the bill re termination of current employees—allowing the employers of the people accused to ascertain whether or not they present a danger to the children.

A-2474-Frelinghuysen—Child Care Employees. Requires all new and present employees of child care centers to undergo state and federal criminal background checks. **Approved.**

A-2477-Hendrickson—Fetal Tissue (S-2172). Authorizes the incineration of fetal tissue of less than 20 weeks' gestation by individuals licensed through the State Department of Health. **Action Deferred,** pending further information from the New Jersey Obstetrical and Gynecological Society, Pathology Society of New Jersey, and MSNJ's Committee on Maternal and Child Care.

A-2485, A-2486, A-2487, A-2489, and A-2490-Kosco—Health Insurance. Requires the various classes of health insurers to cover nuclear magnetic resonance (NMR) scans. **No Action.**

A-2498-Perun—Vitiligo. Creates an education program within the Department of Health regarding the detection and treatment of vitiligo. **Disapproved,** because there has been no evidence submitted to determine the frequency of this disease, its coverage under current insurances, and what the rating impact of mandated benefits would be.

A-2554-Doria—Professional Boards. Creates a Review Commission within the Division of Professional Boards to study and comment on various licensing proposals. **Approved.**

A-2557-Zimmer—Emergency Services. Creates an intermediate EMT unit and type of personnel (companion to **A-2005** of 1984). **Action Deferred,** pending further information from MSNJ's Committee on Emergency Medical Care.

A-2584-Rocco—Fetal Tissue (S-2150). Requires that the remains of any fetus of less than 20 weeks be disposed of by interment. **Action Deferred,** pending further information from the New Jersey Obstetrical and Gynecological Society, Pathology Society of New Jersey, and MSNJ's Committee on Maternal and Child Care.

A-2757-Kern—Nurse Midwives. Empowers the State Board of Medical Examiners to license and regulate nurse-midwives. Creates a five-member Nurse-Midwives Examining Committee which would have the power to license and regulate nurse-midwives. The Committee would have stipulated, delegated powers from the Board and would function independent of the Board. **Active Opposition,** because this situation is adequately covered under existing laws and a joint regulatory committee of the Nursing Board and the Medical Board. Further, the New Jersey Board of Medical Examiners may not, under New Jersey law, delegate functions to a committee which then acts independently.

A-2830-Otlowski—License Suspensions. Requires certain licensing boards to notify the Department of Health whenever they have suspended the license of a practitioner. The Department of Health shall notify the Board of Pharmacy and the Board of Pharmacy shall notify the pharmacists. **Approved.**

A-2872-Felice—Methadone Registry. Establishes a central registry within the Department of Health of patients enrolled in methadone maintenance programs. **Action Deferred,** pending further information from MSNJ's Committee on Drug and Alcohol Abuse.

A-2889-Herman—Physician Assistants. Provides for a separate licensing board to register physician assistants who would function under the supervision of a licensed physician at a 2:1 ratio. **Active Opposition,** because licensure and/or registration of physician's assistants neither will contribute to the quality of medical care nor decrease the cost of medical care (House of Delegates/December 10, 1979).

MEDICAL MALPRACTICE LEGISLATIVE UPDATE

S-1079—Three Year Limitation; S-1112—Cap on Damages; S-1135—Elimination of Windfall Benefits; and S-1140—Impose Certain Requirements on Plaintiff in Medical Malpractice Proceedings; Active Support (Council on Legislation/April 5, 1984). These bills presently are in the Senate Judiciary Committee, to be released in the early spring prior to the Primary Elections. A public hearing is to be scheduled to discuss these bills—physician representation is requested.

The Reference Committee **recommends** that the report be filed.

HOUSE ACTION: Filed.

Supplemental Report #1: Legislation

Irving P. Ratner, M.D., Chairman, Willingboro
(Reference Committee "D")

CURRENT STATE LEGISLATION

The Council offers this Supplemental Report covering items dealt with since the compilation of its Annual Report.

S-1148-Orechio—Group Health Insurance/Drug Abuse Treatment. Requires Blue Cross to cover the expense of treatment for drug abuse as for any other illness. **Approved.**

S-1151-Orechio—Individual Health Insurance Coverage/Drug Abuse Treatment. Same as **S-1148,** but applies to commercial carriers. **Approved.**

S-1152-Orechio—Medical Service Corporation/Drug Abuse Treatment. Same as **S-1151,** but applies to the Blue Cross/Blue Shield. **Approved.**

S-1153-Orechio—Group Health Policies/Drug Abuse Treatment. Same as **S-1151,** but applies to group coverage. **Approved.**

S-1154-Orechio—HMO Coverage/Drug Abuse Treatment. Same as **S-1151,** but applies to HMOs. **Approved.**

S-2330-Foran—Emergency Service. Would allow a paramedic or R.N., with special training, to ride with an EMT unit and perform advance life-support services. **Approved.**

S-2544-Bubba—Consent to Surgery. Requires express written consent to surgery except in cases of physical or mental incapacity or emergencies. The State Board, after consultation with the Health Department, the Medical Society, and the Hospital Association shall prescribe the consent forms which shall be used by physicians. **Active Support.**

S-2554-Foran—Emergency Medical Services. Provides for the establishment of at least two hospital-based EMS helicopter response units. **Action Deferred,** pending further information from MSNJ's Committee on Emergency Medical Care.

S-2573-Pallone—Infant Mortality Prevention. Establishes an infant mortality prevention program which would concentrate on high-risk pregnancies. Appropriates $4 million to implement the program. **Approved.**

S-2582-Van Wagner—Child Abuse Detection. Provides for required training of all employees of child care centers in the detection of child abuse. Also provides for instruction to parents in detecting symptoms of child abuse. **Approved.**

S-2666-Gormley—Alcohol Determinations. Grants immunity to physicians and other health personnel who test urine or blood samples at the request of the patient if they use medically approved techniques and skills. **Approved.**

S-2668-Rand—Peer Review. Grants immunity to PRO agents and employees when the organization is recognized by the Department of Health. Also provides for confidentiality of materials and records of the PRO. **Approved.**

S-2711-Hagedorn—Termination of Pregnancy. Requires a second physician to be present at any termination of pregnancy procedure if the attending physician has determined the unborn fetus is 24 weeks of age or older. The second physician is to provide immediate care to the child if it is born alive. **Action Deferred,** pending further information from the New Jersey Obstetrical and Gynecological Society, New Jersey Society of Pediatrics, and MSNJ's Committee on Maternal and Child Care.

S-2712-Hagedorn—Fetal Viability. Requires the State Board of Medical Examiners to conduct a study as to when fetal viability occurs so that the conduct of physicians may be governed accordingly. Having conducted such a study, the Board is to promulgate guidelines regarding the termination of pregnancy. **Action Deferred,** pending further information from the New Jersey Obstetrical and Gynecological Society, New Jersey Society of Pediatrics, and MSNJ's Committee on Maternal and Child Care.

S-2717-O'Connor—Nutritionists. Provides for the licensing and regulation of nutritionists through a Board of Nutrition within the Department of Law and Public Safety. **Disapproved,** the Society does not believe the licensure of nutritionists would serve a valid public regulatory purpose.

S-2869-Health Care Facilities Act/Certificate of Need. Amends the Certificate of Need to include physicians whenever a health service has been regionalized by regulation of the Department of Health. Regulation would terminate within three years, at which time, the Commissioner could readopt the regulation. **Active Opposition.** There is no evidence the certificate of need concept is a valid regulatory item. It has proved to be ineffective in containing costs, it has stifled initiative, its expansion to intrude on the private practice of medicine is not warranted. Nationally at least four states have repealed certificate of need legislation.

A-2192-Penn—Motor Vehicle Vision Examination. Provides that a licensed ophthalmic dispenser may certify successful completion of the required visual examination for an operator's license. **Approved.**

A-2840-Walker—Criminal Investigations. Provides that law enforcement officers conducting undercover investigations may not pose as an attorney, physician, clergyman, or reporter unless they have received a prior court authorization. **Conditional Approval,** pending removal of the word "physician" from line #3. The Council is of the opinion that, even with Court authorization, it would be unethical and improper for any investigator to pose as a physician.

A-2918-Naples—Major Medical Insurance. Requires commercial insurers issuing basic health policies to forward claims payment advices to the insured's major medical carrier. **Approved.**

A-2921-Garvin—Adolescent Pregnancy. Establishes a Task Force on Adolescent Pregnancy to develop a report to recommend policies and programs which might be implemented to combat adolescent pregnancy. **Conditional Approval,** pending the inclusion of physician representation from the New Jersey Obstetrical and Gynecological Society, the New Jersey Chapter, American Academy of Pediatrics, and the New Jersey Academy of Family Physicians.

A-2948-Loveys—Uniform Anatomical Gift. Requires the Division of Motor Vehicles to place Uniform Anatomical Gift information on the driver's license instead of a separate card. **Conditional Approval,** pending further information from the New Jersey Academy of Ophthalmology and Otolaryngology concerning a meeting with the sponsor of the bill and the director of the Division of Motor Vehicles.

A-2983-Rocco—Birth Certificates. Prohibits any reference to legitimacy or illegitimacy on birth certificates or transmittal notices. **Approved.**

A-3006-Villane—Infant Mortality. Creates a Commission to study infant mortality, determine its causes and devise methods to reduce its instance. **Approved.**

A-3077-Doyle—Consent to Treatment. Establishes an order of consent for medical treatment: a) Competent adults for themselves; b) Parents for minors or their adult mentally disabled child (mother of an illegitimate child has veto power); c) A married person for a mentally disabled spouse; d) Guardians for their wards; e) Adults for their mentally disabled parents; f) Any pregnant female for herself in connection with pregnancy or childbirth; and g) Adult siblings for minor siblings or mentally disabled adult grandchildren.

"Mental disability" means not capable of understanding the nature and consequences of treatment or the decision process. **Approved.**

A-3110-Hardwick—Malpractice. Provides for structured payments in cases exceeding $100,000 liability in future damages. Prohibits punitive damages in medical malpractice cases. **Active Support.**

A-3111-Hardwick—Malpractice. Requires the Court to award attorneys fees to the prevailing party if the other side has been guilty of frivolous actions. **Active Support.**

A-3127-Visotcky—Withholding or Withdrawing Medical Treatment. Provides that if artificial means of support are

denied or withdrawn from an incompetent patient—nourishment, hydration, and medication to alleviate pain cannot be withheld or withdrawn. **Action Deferred,** pending further information from MSNJ's Committee on Biomedical Ethics.

A-3168-Naples—Payment for Health Care Services. Requires courts to delay collection proceedings for 60 days if within 20 days from delivery of the bill, the patient has submitted it to an insurer and provides the billing entity information identifying the claim. An insurer who fails to act on a claim within 45 days (pay or decline) becomes liable for the full amount. **Approved.**

A-3169-Mazur—Certificate of Need. Provides for the withdrawal of a certificate of need when the holder has not made significant progress on the project within eighteen months of the date of issue. **Approved.**

A-3196-Cooper—Seatbelts. Expands the reasons for exemption to the seatbelt requirement. Provides certifying physicians with good faith immunity. **No Action.**

A-3225-Chinnici—Hazardous Substances in the Workplace. Provides that employers without reportable substances are exempt from the "Right to Know Act." Fees paid by such employers are to be returned. **Approved.**

A-3267-Pankok—Critical Care Specialty Beds. Bill requires the Commissioner of Health to establish within a hospital in the state a central critical care specialty beds information and referral center and maintain a 24-hour toll free telephone hotline service for all hospitals in the state to disseminate information about the availability of specific critical care specialty beds. The bill requires that all hospitals with authorized mobile intensive care units report twice a day to the information and referral center about the availability of critical care specialty beds in the reporting hospital's region. Critical care specialty beds include beds for the treatment of burns, spinal cord injuries, intermediate and intensive perinatal care, and microsurgery. Hospitals with mobile intensive care units presently compile information about the availability of these critical care beds within their region, for their own use; however, this information is not compiled or available on a statewide basis. As a result, hospitals often have to make numerous telephone calls to determine where and if an appropriate critical care bed is available. A centralized information and referral center will insure that in an emergency, when delays in obtaining critical care may mean the difference between life and death, hospitals will be able to obtain all the necessary information efficiently and as quickly as possible. **Conditional Approval,** pending further information, from the sponsor of the bill, on the availability of a centralized information and referral center.

The Reference Committee considered A-2192—Motor Vehicle Vision Examination. It feels that the present method of judging the visual acuity of prospective automobile drivers should be left intact. The Reference Committee believes the personnel of the Motor Vehicle Bureau performs this minimal duty satisfactorily and that to allow licensed ophthalmic dispensers to perform this duty might lead the public to believe they are receiving a quality eye examination when, in fact, the examination merely consists of an eye chart reading test and a test for peripheral vision and depth perception, and this might delay medical treatment of a significant ophthalmological disorder.

The Reference Committee **recommends** that the Council on Legislation's position of **Approved** on A-2192 be changed to **Disapproved, with Active Opposition if the bill moves.**

HOUSE ACTION: Not adopted.

The Reference Committee **recommends** that the Supplemental Report be filed.

HOUSE ACTION: Filed.

COUNCIL ON PUBLIC RELATIONS

LOUIS J. BOSCO, M.D., CHAIRMAN, CLIFTON
(Reference Committee "D")

The Council on Public Relations maintains the continuity of our coordinated public relations program in reaching the public, the membership, and the media. The Council studies a variety of projects and instituted those falling within the mandates of the House of Delegates, the Board of Trustees, and the available resources.

CONTINUING PROJECTS

A. Publication and distribution of:

(1) *Membership Newsletter*

(2) Monthly releases: Has Your Doctor Stopped Growing; Give Blood, Give Life; Medicine/World Model—Why Is Your Health Care Costing More; Update of Diagnostic Related Groups; Rising Cost of Medical Care; Where Does Your Health Dollar Go; The Best Medical Care Possible; Driving While Drug Impaired; Pollution of New Jersey Coastal Beaches; Smoking in Public Places; You've Come a Long Way, Baby and anti-smoking releases; development of new recruitment booklet; Personal Message To My Medicare Patients; and Buckle Up, a seat belt release.

(3) A series of posters was developed and distributed for office use. These were extensions of some of the media releases on cost of medical care, Medicaid, smoking, and giving blood.

B. Preparation and publication of special news releases and publicity as required from time to time in furtherance of the Society's business interest and activities, including: 1) The Annual Meeting; 2) selected official programs and activities; and 3) professional liability—through newspaper articles explaining MSNJ's position on professional liability.

C. The Golden Merit Award ceremony continues to be an important function at which our senior physicians, who have been in practice 50 years, receive special recognition. In 1984, 109 physicians were so recognized, making a total of 1,647 since the awards began in 1957. The recipients and their families receive undivided attention from the state and county leaders prior to the formal awards ceremonies and during the reception that follows.

D. Encouragement of increased voluntary blood donations throughout the year and particularly during vacation time in the summer and over Thanksgiving and Christmas holidays.

E. Encouragement of the continuance or establishment of orientation programs for new members by the component societies.

F. Encouragement of medical television programs of informational value to the public.

G. Placement services in *The Journal.*

H. Coordinate efforts of the Council on Public Relations with the Committee on Drug and Alcohol Abuse for future MSNJ involvement in drug abuse education and prevention.

NEWSPAPERS

During the past year, we publicized health topics such as the cost of medical care, choosing your own doctor, hypertension, donating blood, professional liability, drunken driving, driving while drug impaired, pollution of the beaches, smoking in public places, and new trends in medical care including DRGs.

DIRECT MAIL

Each member received two mailings this year. The members were mailed posters entitled: "Give Blood" and "Some Would Have You Think DRGs Were Handed Down from the Mountain."

TELEVISION

During 1984, public service announcements aired out of New York and Philadelphia reached over three million viewers. This is our most effective method o reaching the population of New Jersey. Cooperation from the 11 television stations and several radio sta tions running our material continued to be excellent

SPECIAL PROGRAMMING

A. Preparation of Media Techniques Seminar.

B. Preparation of Women Physicians Membershi Drive Promotion.

C. Promotion of Roving Seminar on Substanc Abuse.

D. Preparation and distribution of material relate to Medicare and PRO changes and controls.

DRUG ABUSE

The Council on Public Relations in cooperation wit the Committee on Drug and Alcohol Abuse continue to make public service promotions on the hazards o the misuse of drugs.

MEMBERSHIP

A special promotion in cooperation with the Amer can Medical Association was launched to increase th membership of physicians in MSNJ and the AMA.

The Reference Committee feels that the Medical S ciety of New Jersey should recognize that the ph sician-patient relationship is the most effective vehic for improving public relations.

The Reference Committee **recommends** that a dire tive be approved that allots sufficient funds to l provided for the Medical Society of New Jersey to i stitute appropriate educational programs to suppo the physician-patient relationship.

HOUSE ACTION: Approved.

The Reference Committee **recommends** that the port be filed.

HOUSE ACTION: Filed.

Board of Trustees' Items

EXPAND LEGISLATIVE SERVICE—RESOLUTION #14 (1984)
(Reference Committee "D")

In 1984, the House of Delegates adopted the above Resolution calling for MSNJ to allocate increased resources to inform county societies, specialty societies, hospital medical staffs, and individual practitioners about upcoming legislative issues and regulatory proposals.

Currently, all specialty societies and county societies are invited to the meetings of the Council on Legislation and the Board of Trustees. Minutes are published in *The Journal.*

The Medical Society of New Jersey staff has instituted the following procedures to effect the intent of the Resolution:

1) The Council on Legislation will meet quarterly with county and specialty society representatives.

2) Regulatory proposals brought before the Board will become the subject of special memoranda to the presidents of county societies, specialty societies, and hospital medical staffs.

3) Every other month, there will be a special section in *The Journal* dealing with a legislative and regulatory update. The status of all active matters will be detailed.

The Reference Committee **recommends** that the report be filed.

HOUSE ACTION: Filed.

NEW JERSEY STATE BOARD OF MEDICAL EXAMINERS' PRONOUNCEMENT OF DEATH REGULATION—RESOLUTION #29E (1984)
(Reference Committee "D")

The above Resolution was referred to the State Board of Medical Examiners following the close of the 1984 Annual Meeting. A committee, appointed by the State Board of Medical Examiners, is reviewing the Resolution and the issue of pronouncement of death. The State Board has not yet filed a status report.

The Reference Committee **recommends** that the report be filed.

HOUSE ACTION: Filed.

RESOLUTION #16

Introduced by: **Essex County Medical Society**
Subject: **Oceanic Ecology**
Referred to: **Reference Committee "D"**

Whereas, attempts to disrupt the natural ecology of our nearby ocean waters could lead to decreased tourism, less edible seafood, and public health problems; and

Whereas, State Senator Richard Van Wagner's Bill, S-2346, would allow trawlers within 880 yards of the beach; and

Whereas, when this was permitted in Massachusetts, the immediate offshore waters were denuded of vital marine life; and

Whereas, loss of species may limit sources of pharmaceuticals and marine products, and vital components of medical research; and

Whereas, a denuded ocean would discourage recreational swimming, boating, and fishing, and cost billions in tourism losses; and

Whereas, all sea life is interconnected, and if trawlers are permitted to scrape the bottom within 880 yards of the beach, our priceless heritage of sea life woul be reduced to barren waste, sticky globs of oil, plasti refuse, and unseen clouds of poisonous effluents; no therefore be it

Resolved, that the Medical Society of New Jerse immediately take active opposition to State Senato Richard Van Wagner's Bill, S-2346, and any simila legislation proposed in either the House or Senate; an be it further

Resolved, that the Medical Society of New Jersey position on ocean ecology be made known by indivic ualized letters to the Governor, the New Jersey Depar ment of Environmental Protection, the United State Environmental Protection Agency, and all senator and representatives from New Jersey.

The Reference Committee **recommends** that Reso lution #16 be adopted.

HOUSE ACTION: Adopted.

RESOLUTION #18

Introduced by: **Essex County Medical Society**
Subject: **Media Seminar**
Referred to: **Reference Committee "D"**

Whereas, Mort Enright (Mort Enright Associates, Inc.) has taught thousands of physicians the art of public speaking; meeting the press, including radio and television, and political interviews; and

Whereas, this firm is expert in preparing professionals for the public arena; and

Whereas, Mr. Enright now is available to teach classes of physicians; now therefore be it

Resolved, that the Medical Society of ~~New Jersey~~ sponsor a one and ~~one-half-day~~ mass media seminar ~~conducted~~ by Mort Enright Associates, Inc., immediately prior to or following the next ~~Annual Meeting a cost to participating~~ physicians of $100.

The Reference Committee **recommends** that the fo lowing Substitute Resolution for Resolution #18 b adopted:

Resolved, that the Medical Society of New Jerse conduct ongoing seminars to educate physicians i the art of public speaking and negotiation, and to mee this end, that the resources of the AMA and othe approved sources be utilized.

HOUSE ACTION: Adopted Substitute Resolution

Resolution #23

Introduced by: **William I. Weiss, M.D., Delegate, Essex County**
Subject: **Medical Assistants, Subcutaneous Injections, Venipuncture, and Performance of Skin Tests**
Referred to: **Reference Committee "D"**

Whereas, in keeping with current regulations, giving subcutaneous injections and performing venipuncture are prohibited in a physician's office by any nonphysician other than a R.N.; and

Whereas, performance of skin tests is limited to physicians; and

Whereas, the decision to give subcutaneous injections and the dosage are determined by the physician alone; and

Whereas, the performance of giving subcutaneous injections, venipuncture, and skin tests are mechanical acts to assist the physician and do not involve any medical decisions or interpretations; and

Whereas, formally trained allied medical personnel are capable of giving subcutaneous injections, performing venipuncture, and administering skin tests with equal skill as R.N.s; and

Whereas, limiting these procedures to R.N.s alone increases the cost of office operations and thereby raises the cost to the patient; now therefore be it

Resolved, that the Medical Society of New Jersey seek the passage of regulations or legislation to authorize formally trained allied medical personnel, in addition to R.N.s, to perform venipuncture and all be allowed to administer subcutaneous injections and perform skin tests under the immediate supervision of a physician.

The Reference Committee **recommends** that Resolution #23 be rejected.

HOUSE ACTION: Adopted. Resolution #23 is rejected.

Resolution #24

Introduced by: **Mercer County Medical Society**
Subject: **Publicizing Costs of Nonpatient Health Care**
Referred to: **Reference Committee "D"**

Whereas, one of the principal concerns of the American people now is the escalating costs of health care in the United States; and

Whereas, references are being made to figures of 11 percent of gross national product and one billion dollars a day as documentation of this staggering and inappropriate cost; and

Whereas, physicians and hospitals receive in large measure the blame for these rising health care costs; and

Whereas, a significant percentage of these costs is due to government requirements and mandated services of one type or another (utilization review personnel, increased record room personnel, PRO reviewers, vice presidents of finance, and so on) as opposed to dollars for direct patient care; and

Whereas, figures on the dollar amount spent for these nonpatient directed costs are not current and need research and publicity; now therefore be it

Resolved, that the Medical Society of New Jersey petition ~~and~~ the American Medical Association to search out an organization or agency to undertake a study of the costs of medical health care that relate to government mandates as opposed to actual patient care; and be it further

Resolved, that the result of such studies be publicized widely to physicians, the media, and the appropriate politicians.

The Reference Committee **recommends** that Resolution #24 be adopted, with the following editorial change to the first line of the first **Resolved:**

Resolved, that the Medical Society of New Jersey petition the American

HOUSE ACTION: Adopted as amended.

REFERENCE COMMITTEE "E"

Reports: ***COUNCIL ON MENTAL HEALTH***
COUNCIL ON PUBLIC HEALTH
RESOLUTIONS #4, 17

Members:
Angelo J. Lopano, M.D., Acting Chairman, Monmouth
James B. Massengill, M.D., Morris
Bernard A. Pekala, M.D., Camden
Philip J. Jasper, M.D., Alternate, Passaic
Lawrence J. Macatee, M.D., Chairman, (absent), Cape May
Roland E. Johnson, M.D., (absent), Sussex

COUNCIL ON MENTAL HEALTH

GEORGE L. TRIEBENBACHER, M.D., CHAIRMAN, BEACH HAVEN
(Reference Committee "E")

1. Mental Health Services Booklet. The Mental Health Services Booklet is being updated. The Council on Mental Health expects the final version to be issued in the fall of 1985.

2. Ad Hoc Committee on New Jersey State Psychiatric Institutions. The Council recommended and the Board of Trustees approved the appointment of an ad hoc committee to investigate patient care and management in state psychiatric institutions and community mental health centers in New Jersey. The Ad Hoc Committee had two meetings and has not completed its findings at the present time.

3. Equitable Insurance Treatment for Mental Illness. The Council on Mental Health recommended to the Council on Legislation that the Health Insurance Code be amended, which was concurred with by the Board of Trustees. This bill would amend the insurance laws to provide that care for mental and emotional disorders shall be reimbursed just as any other medical or surgical treatment for other conditions. The Council also is discussing other avenues to guarantee equitable coverage regarding mental health services.

There was discussion on the Ad Hoc Committee on New Jersey State Psychiatric Institutions, and it was the feeling of the Reference Committee that the Ad Hoc Committee on New Jersey State Psychiatric Institutions should investigate the conditions in our institutions vis-a-vis the enormous amount of publicity recently in the press.

The Reference Committee **recommends** that the report be filed.

HOUSE ACTION: Filed.

Council on Public Health

Charles J. Moloney, M.D., Chairman, Moorestown
(Reference Committee "E")

The Council on Public Health had its reorganization meeting on September 26, 1984.

Childhood Immunizations. The Council recommended, and the Board of Trustees approved, that MSNJ urge the Governor to find a solution to the problem of insufficient Medicaid reimbursement for pertussis and polio immunizations, inasmuch as the present situation will result in children not receiving the benefit of immunization.

Statewide Eye Screening Coordinating Council. The Committee on Conservation of Vision recommended, through the Council on Public Health, and the Board of Trustees approved, the formation of a Statewide Eye Screening Coordinating Council by the New Jersey State Commission for the Blind and Visually Impaired. A representative of the Committee on Conservation of Vision will be appointed to serve on the Statewide Council.

The Reference Committee **recommends** that the report be filed.

HOUSE ACTION: Filed.

Supplement Report #1
Council On Public Health

Charles J. Moloney, M.D., Chairman, Moorestown
(Reference Committee "E")

The following items reported from the Council on Public Health meeting on February 6, 1985, were acted upon by the Board of Trustees, as noted, at its meeting on March 17, 1985.

National Commission on Correctional Health Care. The Council reviewed correspondence from Bernard P. Harrison, President of the National Commission on Correctional Health Care, which described the Commission's work.

The Board approved the Council's recommendation that the National Commission on Correctional Health Care be asked to submit a brief description of its services for possible publication in *The Journal* along with a copy of the proposed letter it would like the Society to endorse and send to the sheriffs of New Jersey.

Laetrile in New Jersey. The Committee on Cancer Control, at its meeting on December 7, 1984, felt that the role of that Committee should be the dissemination of knowledge and understanding to the public regarding worthless or unproved remedies and treatments rather than focusing on whether or not they are legal. It also was felt that the Committee regularly should go on record against the use of laetrile, and that the Committee and the Society should not relax its position for fear that its use may increase gradually.

The Council on Public Health approved and forwarded to the Board of Trustees the Committee's recommendation that the State Legislature be requested to revoke the legalization of laetrile since the drug has proved ineffective in the treatment of cancer and its use may be harmful to the welfare of patients either by delaying appropriate treatment or by causing cyanide toxicity.

The Board of Trustees approved the recommendation and noted that the Medical Society has drafted legislation to repeal the legalization of laetrile, and the State Board of Medical Examiners has indicated that it will support the Society's position when the bill is introduced.

Oncology Society of New Jersey. Because of the need for a more comprehensive system of referral to physicians who treat cancer patients, the Committee on Cancer Control recommended that physicians in the state who are involved in tumor work be identified and urged to join the Oncology Society of New Jersey. The American Cancer Society is reluctant to refer patients to specific physicians and the Oncology Society of New Jersey needs a more comprehensive list of physicians from which to make referrals. The Council on Public Health approved the Committee's recommendation and referred it to the Board of Trustees.

Because the Board felt it inappropriate for the Medical Society of New Jersey to solicit physicians to join a specialty society, the Committee's recommendation was disapproved. However, the Board instructed the staff to identify from the membership masterfile those physicians who list themselves as oncologists and to make this information available to the Oncology Society of New Jersey so that they may solicit those physicians for membership.

The Reference Committee **recommends** that the supplemental report be filed.

HOUSE ACTION: Filed.

RESOLUTION #4

Introduced by: **Burlington County Medical Society**
Subject: **Mammography**
Referred to: **Reference Committee "E"**

Whereas, breast cancer will afflict 1 out of every 11 women during their lifetime, causing 35,000 deaths annually; and

Whereas, over 30 years of efforts to improve survival in breast cancer through improvements in surgery, chemotherapy, and radiation therapy have met with only modest success; and

Whereas, the best hope of attaining better survival rates in this disease lies with early detection; and

Whereas, the only method for detecting breast cancer before it is palpable or metastatic is mammography: and

Whereas, mammography carries a high sensitivity (circa 90 percent) for detection of minimal, occult, and early breast cancer lesions; and

Whereas, survival in breast cancer detected early is on the order of 95 percent; and

Whereas, guidelines put forth by the American College of Radiology have been endorsed either wholly or in similar form by the American Cancer Society, the American College of Surgeons, the American College of Obstetricians and Gynecologists, and the National Institutes of Health; now therefore be it

~~**Resolved,** that the Medical Society of New Jersey adopt and endorse the guidelines advocated by the~~ American College of Radiology and others as follows:

(a) Women between the ages of 35 and 40 years of age should have a baseline mammogram.

(b) Between ages 40 and 50, frequency of mammography should be every two years. Clinical or risk factors evaluated by the patient's physician may alter this frequency.

(c) After age 50, yearly mammography is recommended; and be it further

Resolved, that mammograms following from these recommendations should be made with equipment dedicated to this procedure.

Resolved, that the Medical Society of New Jersey endorse the concept of mammography.

The Resolution was reviewed by the Committee and it was agreed that the general sense of the first **Resolved** was acceptable but that the time intervals of the particulars should be discussed.

The Reference Committee **recommends** that the second Resolved be deleted.

HOUSE ACTION: Not adopted.

The Reference Committee **recommends** that Resolution #4 be adopted as amended.

HOUSE ACTION: Not adopted. Substitute Resolution was adopted.

RESOLUTION #17

Introduced by: **Essex County Medical Society**
Subject: **School Bus Safety**
Referred to: **Reference Committee "E"**

Whereas, it now is law that seat belts be used by New Jersey motorists; and

Whereas, such devices are one of the best ways to prevent serious injury and death, and to practice good preventive medicine; and

Whereas, children must be taught to wear seat belts at all times when they are in motor vehicles; and

Whereas, most school buses presently, are not equipped with seat belts; now therefore be it

Resolved, that the Medical Society of New Jersey strongly petition the legislature, ~~both~~ the Governor, and the Commissioner of Education to require the installation and use of seat belts in all school buses as expeditiously as possible, since this is both an educational awareness program for school children, as well as an excellent program to avoid the possibility of injury or death.

The Reference Committee **recommends** that Resolution #17 be adopted.

HOUSE ACTION: Not adopted. Resolution #17 was adopted as amended by the House.

REFERENCE COMMITTEE ON CONSTITUTION AND BYLAWS

Report: ***COMMITTEE ON REVISION OF CONSTITUTION AND BYLAWS***

Members:
Matis A. Fermaglich, M.D., Chairman
Anthony T. Cherico, M.D., Burlington
Joseph P. Cillo, M.D., Union
Francis A. Deitmaring, M.D., Hudson
John E. Durst, M.D., Monmouth
L. Arne Skilbred, M.D., Alternate, Essex

COMMITTEE ON REVISION OF CONSTITUTION AND BYLAWS

JOHN H. LIFLAND, M.D., CHAIRMAN, SOMERVILLE
(Reference Committee on Constitution and Bylaws)

PROPOSED AMENDMENTS TO THE BYLAWS

1. Election Session of the House of Delegates. The Board of Trustees, upon the request of the Committee on Annual Meeting, directed the Committee to develop Bylaw language, which would transfer the election from the second to the third session of the House of Delegates.

The election session always has had the largest number of delegates in attendance, and following that session attendance dwindles. Since the election is an attractive component of the Annual Meeting, it is hoped that this change will increase attendance at the last session.

Chapter II—Meetings
Section 2—House of Delegates—Meetings

Current

(c) Sessions

The House of Delegates shall meet on the first day of the Annual Meeting of this Society, but may meet in advance of, or after adjournment of, the Annual Meeting. The schedule of sessions and all functions shall be determined by the President.

The Annual Meeting of the House of Delegates shall consist ordinarily of three (3) sessions. Except as otherwise provided, the principal business of these sessions shall be: first session: presentation of annual reports, introduction of resolutions, introduction of new business, and assignment of same to reference committees; second session: report of Nominating Committee and election; third session: presentation of and action upon reports of reference committees, unfinished business, and inauguration of newly elected officers.

Chapter II—Meetings
Section 2—House of Delegates—Meetings

Proposed

(c) Sessions

Same

The Annual Meeting of the House of Delegates shall consist ordinarily of three (3) sessions. Except as otherwise provided, the principal business of these sessions shall be: first session: presentation of annual reports, introduction of resolutions, introduction of new business, and assignment of same to reference committees; second session: presentation of and action upon reference committee reports and other business; third session: consideration of Nominating Committee report and elections, reference committee reports, unfinished business, and inauguration of newly elected officers.

Chapter V—Officers
Section 2—Election

Current

The officers shall be elected by ballot at the second session of the House of Delegates at the Annual Meeting. No member shall be eligible for more than one (1) office at the same time, except the President, the President-Elect, the First and Second Vice-Presidents, the Secretary, and the Treasurer, who by virtue of such offices are at the same time members of the Board of Trustees. A vacancy in office, except that of President-Elect, occurring between Annual Meetings may be filled by the Board of Trustees until the next regular election for the term and office being filled.

Chapter VIII—Procedure of Election
Section 3—Report and Election

Current

(a) The report of the Nominating Committee, the submission of nominations from the floor by members of the House of Delegates—if any—and the election shall constitute the principal business of the second session of the House of Delegates.

Chapter V—Officers
Section 2—Election

Proposed

The officers shall be elected by ballot at the third session of the House of Delegates at the Annual Meeting. No member shall be eligible for more than one (1) office at the same time, except the President, the President-Elect, the First and Second Vice-Presidents, the Secretary, and the Treasurer, who by virtue of such offices are at the same time members of the Board of Trustees. A vacancy in office, except that of President-Elect, occurring between Annual Meetings may be filled by the Board of Trustees until the next regular election for the term and office being filled.

Chapter VIII—Procedure of Election
Section 3—Report and Election

Proposed

(a) The report of the Nominating Committee, the consideration of nominations from the floor, and the election shall be conducted at the third session of the House of Delegates.

The Committee on Revision of Constitution and Bylaws recommends adoption of the Bylaw proposals.

The Reference Committee felt that transferring the election from the second to the third session of the House of Delegates would not necessarily increase attendance at the last session. The principal concern is whether the reference committee hearings would be completed and the reports available for timely participation and consideration by the delegates. It was felt that the Committee on Annual Meeting should be commissioned to produce a schedule of reference committee meetings and reports supporting their recommendation and its practicality.

The Reference Committee **recommends** that the proposed amendment to the Bylaws be referred back to the Committee on Annual Meeting for development of appropriate schedules.

HOUSE ACTION: Adopted, and referred back to the Committee on Annual Meeting for development of appropriate schedules.

2. Executive Committee. Under the present Bylaws, the Secretary and Treasurer of the Society are not listed as voting members of the Executive Committee. They have been serving, however, as consultants since 1977. The Committee believes it is desirable to amend the Bylaws to include these two officers as regular members of the Executive Committee.

Chapter III—Board of Trustees	*Chapter III—Board of Trustees*
Current	**Proposed**
(c) Executive Committee	(c) Executive Committee
The President, President-Elect, First and Second Vice-Presidents, and the Immediate Past-President shall compose the Executive Committee. It shall act on emergency measures when time does not permit a meeting of the Board of Trustees. Any action thus taken shall be subject to formal action of the Board of Trustees at its next meeting.	The President, President-Elect, First and Second Vice-Presidents, Secretary, Treasurer, and the Immediate Past-President shall compose the Executive Committee. It shall act on emergency measures when time does not permit a meeting of the Board of Trustees. Any action thus taken shall be subject to formal action of the Board of Trustees at its next meeting.

The Committee on Revision of Constitution and Bylaws recommends adoption of the Bylaw proposal.

The Reference Committee was unanimous in its opinion that the Secretary and the Treasurer of the Society should be included as regular voting members of the Executive Committee, and the Bylaws should be amended accordingly.

The Reference Committee **recommends** that the proposed amendment to the Bylaws be adopted.

HOUSE ACTION: Adopted.

3. Administrative Councils and Standing Committees. For the last two years, the Committee on Long-Range Planning and Development has been conducting a thorough review of the Society's council and committee structure. Their review determined that the number of members serving on the organization's administrative councils and standing committees should be expanded, but their tenure altered to provide members elected by the House of Delegates to serve no more than three, two-year terms. Members appointed by the President would serve a one-year term, but would be able to be reappointed in the judgment of the President. Council and committee lists would not be fixed and, therefore, could be expanded by the President to meet any need.

Chapter IX—Administrative Councils and Committees Section 1—Classification	*Chapter IX—Administrative Councils and Committees Section 1—Classification*
Current	**Proposed**
There shall be Administrative Councils, Standing Committees, Reference Committees, and Special Committees.	Same

Section 2—Qualifications, Selections and Terms of Members	*Section 2—Qualifcations, Selections and Terms of Members*
(a) Only regular members of the Medical Society of New Jersey may serve on an administrative council or committee, except that one member of the Auxiliary may be appointed by the President to serve on each of the administrative councils and committees for a one-year term.	(a) Same
(b) Reference committee members shall be appointed by the President and must be members of the House of Delegates elected by their respective component societies.	(b) Same
(c) The President shall designate the chairman and vice-chairman of each administrative council and the various committees. The President shall be an ex-officio member of all administrative councils and committees except the Nominating Committee and the Judicial Council.	(c) Same
(d) Unless otherwise stipulated in these Bylaws or in the action creating a special committee, the term of service thereon shall be limited to three (3), three-year terms. Interim appointments and unexpired terms are not to be computed in determining the tenure of any member.	Delete
(e) Members of councils and committees who have failed to discharge their duties in a satisfactory fashion may be removed by the Board of Trustees and the President may fill the resulting vacancy.	(d) Same as current (e)

Section 3—Administrative Councils, Standing Committees and Special Committees	*Section 3—Administrative Councils and Standing Committees*
The administrative councils and standing committees shall be listed below. In addition to projects of their own initiation, they shall perform such functions and duties as are assigned to them by the Board of Trustees and the House of Delegates. Their recommendations shall be subject to the approval of the Board of Trustees.	The administrative councils and standing committees shall be listed below. Members elected by the House shall serve two-year terms. They may serve no more than three such terms. Members appointed by the President shall serve one-year terms with no limitations on their reappointment. The number of appointed members on each council and committee shall be at the discretion of the President. Councils and committees may initiate projects of their own choosing. They also shall perform such functions and duties as are assigned to them by the Board of Trustees and the House of Delegates. Their actions and recommen-

dations shall be subject to the approval of the Board of Trustees.

1. Council on Legislation

The Council on Legislation shall consist of 12 members, 6 of whom shall be elected by the House of Delegates, and 6 appointed by the President. There shall be at least 1 elected and 1 appointed member from each judicial district.

2. Council on Medical Services

The Council on Medical Services shall consist of 12 members, 6 of whom shall be elected by the House of Delegates, and 6 appointed by the President. There shall be at least 1 elected and 1 appointed member from each judicial district. The President-Elect shall serve as an ex-officio member of the Council on Medical Services.

3. Council on Mental Health

The Council on Mental Health shall consist of 12 members, 6 of whom shall be elected by the House of Delegates, and 6 appointed by the President. There shall be at least 1 elected and 1 appointed member from each judicial district. The Immediate Past-President shall be an ex-officio member of the Council on Mental Health.

4. Council on Public Health

The Council on Public Health shall consist of 12 members, 6 of whom shall be elected by the House of Delegates, and 6 appointed by the President. There shall be at least 1 elected and 1 appointed member from each judicial district. The First Vice-President shall be an ex-officio member of the Council on Public Health.

5. Council on Public Relations

The Council on Public Relations shall consist of 12 members, 6 of whom shall be elected by the House of Delegates, and 6 appointed by the President. There shall be at least 1 elected and 1 appointed member from each judicial district. The Second Vice-President shall be an ex-officio member of the Council on Public Relations.

6. Committee on Annual Meeting

The Committee on Annual Meeting shall consist of six

1. Council on Legislation

The Council on Legislation shall consist of six members elected by the House of Delegates, and a discretionary number appointed by the President. There shall be at least one elected member from each judicial district.

2. Council on Medical Services

The Council on Medical Services shall consist of six members elected by the House of Delegates, and a discretionary number appointed by the President. There shall be at least one elected member from each judicial district. The President-Elect shall serve as an ex-officio member of the Council.

3. Council on Mental Health

The Council on Mental Health shall consist of six members elected by the House of Delegates, and a discretionary number appointed by the President. There shall be at least one elected member from each judicial district. The Immediate Past-President shall be an ex-officio member of the Council.

4. Council on Public Health

The Council on Public Health shall consist of six members elected by the House of Delegates, and a discretionary number appointed by the President. There shall be at least one elected from each judicial district. The First Vice-President shall be an ex-officio member of the Council.

5. Council on Public Relations

The Council on Public Relations shall consist of six members elected by the House of Delegates, and a discretionary number appointed by the President. There shall be at least one elected member from each judicial district. The Second Vice-President shall be an ex-officio member of the Council.

6. Committee on Annual Meeting

The Committee on Annual Meeting shall consist of three members, three of whom shall be elected by the House of Delegates, and three appointed by the President. The Secretary shall be an ex-officio member of this Committee.

7. Committee on Credentials

The Committee on Credentials shall consist of seven members, six of whom shall be appointed by the President. The seventh member shall be the Secretary of the Society who also shall serve as chairman of this Committee.

8. Committee on Finance and Budget

The Committee on Finance and Budget shall consist of six members, three elected by and from the House of Delegates, and three elected by and from the Board of Trustees. The Committee shall control the expenditure of funds and the development of the annual budget for submission to the House of Delegates. The Treasurer shall be an ex-officio member of this Committee.

9. Committee on Medical Defense and Insurance

The Committee on Medical Defense and Insurance shall consist of six members, three of whom shall be elected by the House of Delegates, and three appointed by the President. The Secretary shall serve as an ex-officio member of this Committee.

10. Committee on Medical Education

The Committee on Medical Education shall consist of six members, three of whom shall be elected by the House of Delegates, and three appointed by the President.

11. Committee on Medical Student Loan Fund

The Committee on Medical Student Loan Fund shall consist of five members appointed by the President.

12. Committee on Publication

The Committee on Publication shall consist of six members, three of whom shall be elected by the House of Delegates and three members appointed by the President. The President-Elect, the Secretary, and the Editor of *The Journal* shall be ex-officio members of the Committee on Publication.

members elected by the House of Delegates, and a discretionary number appointed by the President. The Secretary shall be an ex-officio member of this committee.

7. Committee on Credentials

The Committee on Credentials shall consist of the Secretary of the Society, and a discretionary number appointed by the President. The Secretary shall serve as chairman of this Committee.

8. Committee on Finance and Budget

The Committee on Finance and Budget shall consist of three members elected by and from the House of Delegates, and a discretionary number appointed by the President from the Board of Trustees. The Committee shall control the expenditure of funds and the development of the annual budget for submission to the House of Delegates. The Treasurer shall be an ex-officio member of this Committee.

9. Committee on Membership Services

The Committee on Membership Services shall consist of three members elected by the House of Delegates, and a discretionary number appointed by the President. The Secretary shall serve as an ex-officio member of this Committee.

10. Committee on Medical Education

The Committee on Medical Education shall consist of three members elected by the House of Delegates, and a discretionary number appointed by the President.

11. Committee on Medical Student Loan Fund

The Committee on Medical Student Loan Fund shall consist of at least five members appointed by the President.

12. Committee on Publication

The Committee on Publication shall consist of three members elected by the House of Delegates, and a discretionary number appointed by the President. The President-Elect, the Secretary, and the Editor of *The Journal* shall be ex-officio members of the Committee.

13. Committee on Revision of Constitution and Bylaws	13. Committee on Revision of Constitution and Bylaws
The Committee on Revision of Constitution and Bylaws shall consist of six members appointed by the President. The Secretary shall be an ex-officio member of the Committee.	The Committee on Revision of Constitution and Bylaws shall consist of at least six members appointed by the President. The Secretary shall be an ex-officio member of the Committe.
14. Advisory Committee to the Auxiliary	14. Advisory Committee to the Auxiliary
The Advisory Committee to the Auxiliary shall consist of six members, three of whom shall be elected by the House of Delegates, and three appointed by the President.	The Advisory Committee to the Auxiliary shall consist of three members elected by the House of Delegates, and a discretionary number appointed by the President.
15. Committee on Medicaid	15. Committee on Medicaid
The Committee on Medicaid shall consist of members appointed by the Board of Trustees. The number to be appointed shall be determined by the Board of Trustees. The Committee shall be responsible for representing the viewpoint of the members of the Medical Society of New Jersey, and to act as liaison with the Division of Medical Assistance and Health Services, Department of Human Services.	The Committee on Medicaid shall consist of at least ten members appointed by the President. The Committee shall be responsible for representing the viewpoint of the members of the Medical Society of New Jersey, and to act as liaison with the Division of Medical Assistance and Health Services, Department of Human Services.
16. Special Committees	*Section 4—Special Committees*
Special committees may be created by the House of Delegates or the Board of Trustees. They shall be appointed by the President. Their function and duration shall be clearly defined.	Same
17. Reference Committees	*Section 5—Reference Committees*
Such reference committees as are deemed necessary by the President shall be appointed by him. All business coming before the consideration of the House of Delegates must first be considered by the appropriate reference committee unless the House of Delegates constitutes itself as a committee of the whole.	Same
Reference committees shall have plenary jurisdiction on the items referred to them. Their reports are subject to the final approval of the House of Delegates. They may not, however, make amendments or alterations to reports that are solely informative in nature and do not call for specific approval of the House.	Same

The Committee on Revision of Constitution and Bylaws believes such an expansion and format will benefit the Society and recommends adoption of the Bylaw proposal.

The Reference Committee discussed at length the proposed restructuring of the Administrative Councils and Standing Committees, which would permit the President to appoint a discretionary number of members to the various councils and committees. The Committee was concerned that such a procedure might produce an unstable environment and administrative difficulties. It is, therefore, felt that this matter should be referred back to the Committee on Long-Range Planning and Development for review of these points and consideration of whether or not a fixed number and tenure might be used.

The Reference Committee **recommends** that the proposed amendment to the Bylaws be referred back to the Committee on Long-Range Planning and Development for clarification.

HOUSE ACTION: Not adopted. The proposed amendment to the Bylaws was adopted.

4. Provisional Membership for Resident Physicians. The Committee on Long-Range Planning and Development addressed the length of time it takes for a resident to become a member of the county and state societies after making application locally. A delay of six months to one year is not uncommon. The Board of Trustees and the Committee on Long-Range Planning and Development believe that a resident physician should be able to apply simultaneously to the state and county societies. If the physician's credentials are found to be in order, the State Society then may grant provisional membership for six months. During this time, the physician then would complete the county application process.

Chapter XI—Component Societies *Section 2—Qualifications of Members*	*Chapter XI—Component Societies* *Section 2—Qualifications of Members*
Current	**Proposed**
(a) Component societies shall have the responsibility to judge the qualifications of an applicant for any type of membership and alone shall have the power to elect him, but election thereto shall be contingent upon clearance of each eligible applicant's formal credentials as satisfactory by the Committee on Credentials of this Society.	(a) Component societies shall have the responsibility to judge the qualifications of an applicant for any type of membership and alone shall have the power to elect him, but election thereto shall be contingent upon clearance of each eligible applicant's formal credentials as satisfactory by the Committee on Credentials of this Society. Resident physicians shall apply simultaneously to the Society and a component society. If the credentials are in order, the State Society may grant a provisional membership for six months. During that time, the physician shall complete the county application process.

The Committee on Revision of Constitution and Bylaws agrees that a more expeditious procedure is needed and recommends adoption of the Bylaw proposal.

Although the Reference Committee recognized the reasons for the Bylaw amendment to create a six-month provisional membership for resident physicians in MSNJ while their membership in a component society is being developed, they were at odds concerning its real value to the Society. It was the general feeling of the Committee that this is a question concerning the basic structure of the Medical Society, and the potential of creating an autonomous state society. The Committee therefore urges that the proposed amendment to the Bylaws be referred back to the Committee on Long-Range Planning and Development for further study and recommendation. The Committee believes the appropriate solution to this problem is prompt processing of resident physician applications by the component societies.

The Reference Committee **recommends** that the proposed Bylaw amendment be referred back to the Committee on Long-Range Planning and Development for further study and development.

HOUSE ACTION: Not adopted. The proposed amendment to the Bylaws was adopted.

Report Of Nominating Committee

Office	Term	Nominee and County
President-Elect	1 year	Edward A. Schauer, M.D., Monmouth
1st Vice-President	1 year	Harry M. Carnes, M.D., Camden
2nd Vice-President	1 year	Palma E. Formica, M.D., Middlesex
Trustees:		
1st District	3 years	Fred M. Palace, M.D., Morris
4th District	3 years	Louis L. Keeler, M.D., Camden
4th District	3 years	Edwin W. Messey, M.D., Burlington
5th District	3 years	Harry W. Fullerton, Jr., M.D., Salem
3rd District	2 years	Joseph P. Zawadsky, M.D., Middlesex*
Judicial Councilor:		
3rd District	3 years	Louis G. Fares, M.D., Mercer
AMA Delegates:		
	2 years	William J. D'Elia, M.D., Monmouth
	2 years	Myles C. Morrison, Jr., M.D., Morris
	2 years	Frank Y. Watson, M.D., Essex
AMA Alternate Delegates:		
	2 years	L. Arnes Skilbred, M.D., Essex
	2 years	S. Thomas Carter, Jr., M.D., Camden
	2 years	Armando F. Goracci, M.D., Gloucester
	2 years	William E. Ryan, M.D., Mercer
	2 years	Edward A. Schauer, M.D., Monmouth
Administrative Councils:		
Legislation:		
2nd District	3 years	Thomas J. Connolly, Jr., M.D., Hudson
3rd District	3 years	Gabriel F. Sciallis, M.D., Mercer
Medical Services:		
2nd District	3 years	Joseph W. Fleisher, M.D., Hudson
3rd District	3 years	B. Ralph Wayman, Jr., M.D., Mercer
Mental Health:		
4th District	3 years	Kenneth J. Rubin, M.D., Monmouth
5th District	3 years	N.J. George, M.D., Cumberland
1st District	1 year	Rita R. Newman, M.D., Essex†
Public Health:		
2nd District	3 years	Albert Ehrlich, M.D., Hudson
3rd District	3 years	Thomas E. Desmond, M.D., Middlesex
Public Relations:		
3rd District	3 years	O. Andrei Kaczala, M.D., Middlesex
6th Member	3 years	Harry H. Brunt, Jr., M.D., Monmouth
Standing Committees:		
Annual Meeting	3 years	Frank R. Romano, Sr., M.D., Union
Auxiliary Advisory	3 years	Frank R. Romano, Sr., M.D., Union
Finance and Budget	3 years	George L. Triebenbacher, M.D., Ocean
Medical Defense & Insurance	3 years	John E. Bocker, M.D., Monmouth
Medical Education	3 years	Sanford H. Vernick, M.D., Ph.D., Monmouth
Publication	3 years	Robert J. Gorrell, Jr., M.D., Ocean
	2 years	Clement H. Kreider, Jr., M.D., Monmouth°

*Elected to the unexpired term of Palma E. Formica, M.D. Doctor Formica was elected Second Vice-President.
†Vacancy created by resignation of Alvin Friedland, M.D.
°Vacancy created by resignation of Dirck L. Brendlinger, M.D.

This report was adopted as amended by the House of Delegates.

Official Attendance Report

County	Delegates	Members	Total
Atlantic	5	3	8
Bergen	36	11	47
Burlington	13	3	16
Camden	21	5	26
Cape May	—	—	—
Cumberland	5	3	8
Essex	49	21	70
Gloucester	1	2	3
Hudson	16	7	23
Hunterdon	2	—	2
Mercer	15	8	23
Middlesex	20	4	24
Monmouth	22	5	27
Morris	12	7	19
Ocean	4	2	6
Passaic	24	9	33
Salem	2	4	6
Somerset	4	3	7
Sussex	2	1	3
Union	35	12	47
Warren	3	—	3
Fellows and Officers	15	—	15
	306	110	416
Delegates Specialty Societies	4		4
Delegate MSNJ Student Association	—		—
	310		

Physician Guests	12
Physician Exhibitors	—
Total Physician Registration	432
Auxiliary	186
Medical Students	7
Visitors	149
Exhibitors	101
Total Registration	875

Three-Year Comparative Registration Figures

Year	Physicians	Others	Total
1985	432	443	875
1984	707	460	1,167
1983	814	454	1,268

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Our Human Resource Division Can:

- Enables you to have your own Profit Sharing Plan and Medical Reimbursement Plan in accordance with TEFRA requirements.
- Provide Immediate Vesting in Our Pension Plan and Extensive benefits to your employees per TEFRA Act of 1982.
- Provide field representatives to handle all personnel paperwork such as weekly payroll, payroll deductions, employee manuals, insurance paperwork, government forms, unemployment paperwork and hearings, disability forms and employee counseling related to all of these.
- Save You Valuable Time and Money

Call Mary Pomerantz at (201) 246-7100
for a free consultation and cost projection.

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